

# THE CRITICAL REVIEW.

For SEPTEMBER, 1784.

*A Voyage to the Pacific Ocean. Undertaken, by the Command of his Majesty, for making Discoveries in the Northern Hemisphere. (Concluded, from p. 96.)*

CAPT. King, in the continuation of the narrative, differs from Mr. Anderson in one circumstance which relates to the inhabitants of Sandwich Islands. He thinks that they do not eat human flesh; and that the bit of salted meat, observed by Mr. Anderson, was really pork. In fact, there are but narrow limits between the two opinions. The resemblance between these islanders and the inhabitants of New Zealand is very conspicuous; their customs are similar in other respects, and there probably was a time when they were not very different in this particular. We have already accounted for the disuse of the custom in the Society Islands; but, even there, we observe its vestige in presenting the eye to the chief. This fact is more remarkable, as we find that many of their customs are still preserved by representations seemingly allegorical. The natchè, or the ceremony by which the king's son is introduced to a share in the government in the Friendly Islands, is entirely of this kind. The plantain roots are also there represented by bits of wood. We are willing to allow that the custom is now rare, and probably may sometimes excite horror; for the smallest dawn of reason, or the slightest approach towards refinement, must necessarily occasion it.

The other customs of the Sandwich islanders are, in some minute circumstances, different from those which prevail in the other islands. The ornaments of a nation are so often the effects of caprice, that they never deserve to be ranked among the arguments which should determine their origin. But the resemblance of their dress, and particularly of their helmets, to those of the Spaniards, deserves attention. Captain King

VOL. LVIII. Sept. 1784. M thinks

thinks it may have arisen from some shipwrecked buccaneer, or Acapulco mariner; for the course from Acapulco to the Manillas is but a few degrees to the southward of these islands in their passage out, and to the northward in their return. They sometimes procured iron from the same source. It is probable that some resemblance may be found in their ornaments to the Mexicans; but it is remote and trifling. As Mexico is to the windward, it could not easily be derived from thence: it is still more improbable that it should have originated here; for the Mexicans were probably a nation before the Sandwich Islands had emerged from the sea. There are certainly no proofs of their very high antiquity. The language is also similar to that of the other tropical islanders: in particular the word taboo retains its varied and extensive signification. It seemed originally to have denoted *sacred*; but, on the one hand, it means sometimes *devoted*, and on the other *supreme*. There are many instances of this peculiarity in other languages. The various purposes of the plantain root are also retained in this northern groupe. It is the signal of peace, it is an ensign of religion, a mark of property, &c. which all seemed to originate from its being consecrated to religious ceremonies. The baleful yew owes its epithet, and its fancied lurid aspect, only to our commonly planting it in church-yards. We shall select captain King's character of the islanders, not only on account of the subject but the manner, which is clear and elegant.

‘Notwithstanding the irreparable loss we suffered from the sudden resentment and violence of these people, yet, in justice to their general conduct, it must be acknowledged, that they are of the most mild and affectionate disposition; equally remote from the extreme levity and fickleness of the Otaheitan, and the distant gravity and reserve of the inhabitants of the Friendly Islands. They appear to live in the utmost harmony and friendship with one another. The women, who had children, were remarkable for their tender and constant attention to them; and the men would often lend their assistance in those domestic offices, with a willingness that does credit to their feelings.

‘It must, however, be observed, that they fall very short of the other islanders, in that best test of civilization, the respect paid to the women. Here they are not only deprived of the privilege of eating with the men, but the best sorts of food are tabooed, or forbidden them. They are not allowed to eat pork, turtle, several kinds of fish, and some species of the plantains; and we were told that a poor girl got a terrible beating, for having eaten, on board our ship, one of these interdicted articles. In their domestic life, they appear to live almost entirely



by themselves, and though we did not observe any instances of personal ill-treatment, yet it was evident they had little regard or attention paid them.

'The great hospitality and kindness, with which we were received by them, have been already frequently remarked; and indeed they make the principal part of our transactions with them. Whenever we came on shore, there was a constant struggle who should be most forward in making us little presents, bringing refreshments, or shewing some other mark of their respect. The old people never failed of receiving us with tears of joy; seemed highly gratified with being allowed to touch us, and were constantly making comparisons between themselves and us, with the strongest marks of humility. The young women were not less kind and engaging, and, till they found, notwithstanding our utmost endeavours to prevent it, that they had reason to repent of our acquaintance, attached themselves to us without the least reserve.

'In justice, however, to the sex, it must be observed, that these ladies were probably all of the lower class of the people; for I am strongly inclined to believe, that, excepting the few, whose names are mentioned in the course of our narrative, we did not see any woman of rank during our stay amongst them.

'Their natural capacity seems, in no respect, below the common standard of mankind. Their improvements in agriculture, and the perfection of their manufactures, are certainly adequate to the circumstances of their situation, and the natural advantages they enjoy. The eager curiosity, with which they attended the armourer's forge, and the many expedients they had invented, even before we left the islands, for working the iron they had procured from us, into such forms as were best adapted to their purposes, were strong proofs of docility and ingenuity.

'Our unfortunate friend, Kaneena, possessed a degree of judicious curiosity, and a quickness of conception, which was rarely met with amongst these people. He was very inquisitive after our customs and manners; asked after our king; the nature of our government; our numbers; the method of building our ships; our houses; the produce of our country; whether we had wars; with whom; and on what occasions; and in what manner they were carried on; who was our God; and many other questions of the same nature, which indicated an understanding of great comprehension.

'We met with two instances of persons disordered in their minds, the one a man at Owhyhee, the other a woman at Oneeheow. It appeared, from the particular attention and respect paid to them, that the opinion of their being inspired by the Divinity, which obtains among most of the nations of the East, is also received here.'

These islands have in some places the appearance of coral ledges; but, in other parts, are evidently the production of volcanos.

• The coast of Kaoo presents a prospect of the most horrid and dreary kind: the whole country appearing to have undergone a total change from the effects of some dreadful convulsion. The ground is every where covered with cinders, and intersected in many places with black streaks, which seem to mark the course of a lava that has flowed, not many ages back, from the mountain Roa to the shore. The southern promontory looks like the mere dregs of a volcano. The projecting head-land is composed of broken and craggy rocks, piled irregularly on one another, and terminating in sharp points.

• Notwithstanding the dismal aspect of this part of the island, there are many villages scattered over it, and it certainly is much more populous than the verdant mountains of Apoona. Nor is this circumstance hard to be accounted for. As these islanders have no cattle, they have consequently no use for pasturage, and therefore naturally prefer such ground, as either lies more convenient for fishing, or is best suited to the cultivation of yams and plantains. Now amidst these ruins, there are many patches of rich soil, which are carefully laid out in plantations, and the neighbouring sea abounds with a variety of most excellent fish, with which, as well as with other provisions, we were always plentifully supplied. Off this part of the coast we could find no ground, at less than a cable's length from the shore, with a hundred and sixty fathoms of line, excepting in a small bight to the eastward of the South point, where we had regular soundings of fifty and fifty-eight fathoms over a bottom of fine sand. Before we proceed to the western districts, it may be necessary to remark, that the whole coast side of the island, from the northern to the southern extremity, does not afford the smallest harbour or shelter for shipping.

• The south-west parts of Akona are in the same state with the adjoining district of Kaoo; but farther to the north, the country has been cultivated with great pains, and is extremely populous.

• In this part of the island is situated Karakakooa Bay, which has been already described. Along the coast nothing is seen but large masses of slag, and the fragments of black scorched rocks; behind which, the ground rises gradually for about two miles and a half, and appears to have been formerly covered with loose burnt stones. These the natives have taken the pains of clearing away, frequently to the depth of three feet and upward; which labour, great as it is, the fertility of the soil amply repays. Here, in a rich ashy mould, they cultivate sweet potatoes, and the cloth-plant. The fields are inclosed with stone fences, and are interspersed with groves of cocoa-nut trees. On the rising ground beyond these, the bread-



bread-fruit trees are planted, and flourish with the greatest luxuriance.

We have preferred this passage, as it is a descriptive account of a country which has just suffered from the ravages of a volcano, and as it confirms our opinion of the cause of those coral islands, which are surrounded by a very deep sea. The country is described imperfectly by some of the crew, who endeavoured to reach the snowy mountains, the highest one of which probably much exceeds 18,000 feet: this height is very near that of Chimborazza, one of the highest points of the Andes, which, from an inferior authority, would have seemed almost incredible. The cold, at a slight distance inland, though in latitude of 20° only, was extremely inconvenient. But of this interior journey we shall only transcribe the following paragraph.

‘The want of provisions now making it necessary to return to some of the cultivated parts of the island, they quitted the wood by the same path they had entered it; and, on their arrival at the plantations, were surrounded by the natives, of whom they purchased a fresh stock of necessaries; and prevailed upon two of them to supply the place of the guides that were gone away. Having obtained the best information in their power, with regard to the direction of their road, the party being now nine in number, marched along the skirts of the wood for six or seven miles, and then entered it again by a path that bore to the eastward. For the first three miles, they passed through a forest of lofty spice-trees, growing on a strong rich loam; at the back of which they found an equal extent of low shrubby trees, with much thick underwood, on a bottom of loose burnt stones. This led them to a second forest of spice-trees, and the same rich brown soil, which was again succeeded by a barren ridge of the same nature with the former. This alternate succession may, perhaps, afford matter of curious speculation to naturalists. The only additional circumstance I could learn relating to it was, that these ridges appeared, as far as they could be seen, to run in directions parallel to the sea-shore, and to have Mouna Roa for their centre.’

The productions of the Sandwich Islands are not materially different from those visited in more southern latitudes. Our navigators however saw here the birds of Paradise, the hinder parts of which are usually cut off, since the most valuable feathers are before. In this account they have been reported to have no legs. They were hitherto known in Europe, in consequence of being imported by the Dutch, from the south-eastern coasts of Asia, in the same condition.

But we must not leave these islands without relating the circumstances of the unfortunate events which occurred in them.

It is generally known that captain Cook here lost his life, in an inconsiderable dispute with the natives; but the accident has not yet been properly understood. He was received no where with greater respect; was styled the Orono or Deity, and treated, in every circumstance, as a superior being. The respect was somewhat diminished by an early insult offered to Pareea, an eminent chief. In the second visit, and in an accidental scuffle, on account of some petty thieveries, the same Pareea was knocked down with an oar. The next day the Discovery's cutter was stolen; perhaps it was considered as an advantageous mode of revenge, or the first act of hostility, from the high independent spirit of the insulted chief, for it certainly was not with the authority of the king. Captain Cook, as usual, to recover it, endeavoured to get possession of the king's person. With his two sons he had actually agreed to dine on board the Resolution; and if they had done so, it is probable that the whole would have terminated successfully.

Things were in this prosperous train, the two boys being already in the pinnace, and the rest of the party having advanced near the water-side, when an elderly woman called Kanee-kabareea, the mother of the boys, and one of the king's favourite wives, came after him, and with many tears, and entreaties, besought him not to go on board. At the same time, two chiefs, who came along with her, laid hold of him, and insisting that he should go no farther, forced him to sit down. The natives, who were collecting in prodigious numbers along the shore, and had probably been alarmed by the firing of the great guns, and the appearances of hostility in the bay, began to throng round captain Cook and their king. In this situation, the lieutenant of marines, observing that his men were huddled close together in the crowd, and thus incapable of using their arms, if any occasion should require it, proposed to the captain, to draw them up along the rocks, close to the water's edge; and the crowd readily making way for them to pass, they were drawn up in a line, at the distance of about thirty yards from the place where the king was sitting.

All this time, the old king remained on the ground, with the strongest marks of terror and dejection on his countenance; captain Cook, not willing to abandon the object for which he had come on shore, continuing to urge him in the most pressing manner, to proceed; whilst, on the other hand, whenever the king appeared inclined to follow him, the chiefs, who stood round him, interposed, at first with prayers and entreaties, but afterward, having recourse to force and violence, and insisted on his staying where he was. Captain Cook therefore finding, that the alarm had spread too generally, and that it was in vain



to think any longer of getting him off, without bloodshed, at last gave up the point; observing to Mr. Phillips, that it would be impossible to compel him to go on board, without the risk of killing a great number of the inhabitants.

Though the enterprize, which had carried captain Cook on shore had now failed, and was abandoned, yet his person did not appear to have been in the least danger, till an accident happened, which gave a fatal turn to the affair. The boats, which had been stationed across the bay, having fired at some canoes, that were attempting to get out, unfortunately had killed a chief of the first rank. The news of his death arrived at the village where captain Cook was, just as he had left the king, and was walking slowly toward the shore. The ferment it occasioned was very conspicuous; the women and children were immediately sent off; and the men put on their war-mats, and armed themselves with spears and stones. One of the natives, having in his hands a stone, and a long iron spike (which they call a pahooa) came up to the captain, flourishing his weapon, by way of defiance, and threatening to throw the stone. The captain desired him to desist; but the man persisting in his insolence, he was at length provoked to fire a load of small-shot. The man having his mat on, which the shot were not able to penetrate, this had no other effect than to irritate and encourage them. Several stones were thrown at the marines; and one of the erees attempted to stab Mr. Phillips with his pahooa; but failed in the attempt, and received from him a blow with the butt end of his musquet. Captain Cook now fired his second barrel, loaded with ball, and killed one of the foremost of the natives. A general attack with stones immediately followed, which was answered by a discharge of musquetry from the marines, and the people in the boats. The islanders, contrary to the expectations of every one, stood the fire with great firmness; and before the marines had time to reload, they broke in upon them with dreadful shouts and yells. What followed was a scene of the utmost horror and confusion.

Four of the marines were cut off amongst the rocks in their retreat, and fell a sacrifice to the fury of the enemy; three more were dangerously wounded; and the lieutenant who had received a stab between the shoulders with a pahooa, having fortunately reserved his fire, shot the man who had wounded him just as he was going to repeat his blow. Our unfortunate commander, the last time he was seen distinctly, was standing at the water's edge, and calling out to the boats to cease firing, and to pull in. If it be true, as some of those who were present have imagined, that the marines and boat-men had fired without his orders, and that he was desirous of preventing any further bloodshed, it is not improbable, that his humanity, on this occasion, proved fatal to him. For it was remarked,

that whilst he faced the natives, none of them had offered him any violence, but that having turned about, to give his orders to the boats, he was stabbed in the back, and fell with his face into the water. On seeing him fall, the islanders set up a great shout, and his body was immediately dragged on shore, and surrounded by the enemy, who snatching the dagger out of each other's hands, shewed a savage eagerness to have a share in his destruction.

Thus fell this truly great man ! But he wants not our eulogy ; the extreme ends of the earth, we now speak without a metaphor, have been witnesses of his judgment and conduct ; of his spirit and his humanity.—A short life of this celebrated navigator is subjoined, written with elegance and sensibility. It certainly reflects as much honour on the author as on his subject.

It was determined, after the death of captain Cook, to pursue his schemes, and again to proceed northward. The moveable barrier might be in a more favourable situation ; and, if it was not possible to proceed westward, the passage eastward to Europe was no trifling object. With these views, they coasted on the east of Asia ; and without any material discoveries, reached the town and harbour of St. Peter and Paul, in Awatska bay, which, as usual in the northern Pacific, faces the south. It was now in the month of April, and in latitude 53, yet the appearance of the country was dreary, from the snow and ice which continually presented themselves.

‘ Having passed the mouth of the bay, which is about four miles long, we opened a large circular basin of twenty-five miles in circumference ; and, at half past four, came to an anchor in six fathoms water, being afraid of running foul on a shoal, or some sunk rocks, which are said by Muller, to lie in the channel of the harbour of St. Peter and St. Paul. The middle of the bay was full of loose ice, drifting with the tide ; but the shores were still entirely blocked up with it. Great flocks of wild fowl were seen of various species ; likewise ravens, eagles, and large flights of Greenland pigeons. We examined every corner of the bay, with our glasses, in search of the town of St. Peter and St. Paul ; which, according to the accounts given us at Conalaska, we had conceived to be a place of some strength and consideration. At length we discovered, on a narrow point of land to the north north-east, a few miserable log-houses, and some conical huts, raised on poles, amounting in all to about thirty ; which, from their situation, notwithstanding all the respect we wished to entertain for a Russian ostrog, we were under the necessity of concluding to be Petropaulowka. However, in justice to the generous and hospitable



spitable treatment we found here, I shall beg leave to anticipate the reader's curiosity, by assuring him, that our disappointment proved to be more of a laughable than a serious nature. For, in this wretched extremity of the earth, situated beyond every thing that we conceived to be most barbarous and inhospitable, and as it were, out of the very reach of civilization, barricaded with ice, and covered with summer snow, in a poor miserable port, far inferior to the meanest of our fishing towns, we met with feelings of humanity, joined to a greatness of mind, and elevation of sentiment, which would have done honour to any nation or climate.'

From this specimen, our readers may judge of the subsequent narrative, which is written with singular spirit and feeling. How strong is that attachment, when the minutest circumstance and the remotest connections, arouse every latent spark of sensibility, and render each peculiarly interesting! Stupendous cliffs, never perhaps visited by human footsteps, two continents, to which the eyes of philosophers have been directed with anxious suspense, men influenced only by their own natural resources, without the advantages either of emulation or imitation, may raise a transitory admiration; the sight of a pewter spoon, marked London, in the extremes of Asia, calls forth the whole soul 'in anxious hopes, pleasant thoughts, and tender remembrances.' To the philosopher and politician, our author very properly adds, they may suggest reflections of a different nature. The whole of this chapter is such a contrast to the rest of the work, and is so exquisitely written, that we know not when we have received an equal degree of pleasure from a narrative. We regret that we can select no part: it is not easy to choose, and perhaps the effect might be inconsiderable to those who had not perused the whole work. We can only observe, that major Behn seems to have conducted himself with singular propriety, and to have adequately represented a humane and magnificent empress. 'The well supported politeness and attention,' of the inhabitants 'in a country so desolate and uncultivated,' formed a contrast exceedingly favourable to them.

'If I may judge of the soil, says our author, from what I saw of its vegetable productions, I should not hesitate in pronouncing it barren in the extreme. Neither in the neighbourhood of the bay, nor in the country I traversed on my journey to Bolcheretsk, nor in any of our hunting expeditions, did I ever meet with the smallest spot of ground that resembled what in England is called a good green turf; or that seemed as if it could be turned to any advantage, either in the way of pasturage, or other mode of cultivation. The face of the country  
in

in general was thinly covered with stunted trees, having a bottom of moss, mixed with low weak heath. The whole bore a more striking resemblance to Newfoundland, than to any other part of the world I had ever seen.'

But this description is not to be extended to the banks of the rivers, which produce strong and succulent grass. The rest of the peninsula has probably, at no very distant period, emerged from the sea; for the volcanos are now very numerous. Three continue still to pour out fire and smook; others are perhaps only collecting materials for fresh devastations. Hot springs, though frequent in volcanic countries, are not the necessary accompaniments of volcanos. In Kamtschatka they are numerous; but one only was observed by our author.

'We saw, at some distance, the steam rising from it, as from a boiling caldron; and as we approached, perceived the air had a strong sulphureous smell. The main spring forms a basin of about three feet in diameter; besides which, there are a number of lesser springs, of the same degree of heat in the adjacent ground; so that the whole spot, to the extent of near an acre, was so hot, that we could not stand two minutes in the same place. The water flowing from these springs is collected in a small bathing pond, and afterwards forms a little rivulet; which, at the distance of about an hundred and fifty yards, falls into the river. The bath, they told us, had wrought great cures in several disorders, such as rheumatisms, swelled and contracted joints, and scorbutic ulcers. In the bathing-place the thermometer stood at  $100^{\circ}$ , or blood heat; but in the spring, after being immersed two minutes, it was  $1^{\circ}$  above boiling spirits. The thermometer in the air, at this time, was  $34^{\circ}$ ; in the river  $40^{\circ}$ ; and in the toion's house  $64^{\circ}$ .

It seems as if all northern countries were similar; a spring of somewhat greater heat is in the neighbourhood of Hecla. The height of boiling spirits is from  $174$  to  $180^{\circ}$ , according to its strength.

The customs of the Kamtschatdales are now well known, so that we shall not enlarge on them.—The most remarkable circumstance, mentioned by our author, is the various and extensive use of every part of the whale.

'Of the skin they make the soles of their shoes, and straps and thongs for various other purposes. The flesh they eat, and the fat is carefully stored, both for kitchen use, and for their lamps. The whiskers are found to be the best materials for sewing together the seams of their canoes; they likewise make nets of them for the larger kind of fish; and with the under jaw-



jaw-bones their sledges are shod. They likewise work the bones into knives; and formerly the chains with which their dogs are tied, were made of that material, though at present iron ones are generally used. The intestines they clean, then blow and dry like bladders, and it is in these their oil and grease is stored; and of the nerves and veins, which are both strong, and slip readily, they make excellent snares; so that there is no part of the whale which here does not find its use.

The use of dogs, to draw the sledges, has been frequently mentioned by different authors.

In the second voyage to the north, various circumstances are mentioned, which confirm our opinion, that the continents were formerly more distant; marks of volcanos are still evident on many parts of the Asiatic coast. The ice was now farther to the southward, consequently the season was less adapted to discovery than the former ones. In the mid-channel, their highest latitude was  $69^{\circ} 37'$ ; and at about seven or eight leagues from Icy Cape, the most north-eastern cape of America that had ever been seen, it was  $70^{\circ} 33'$ , five leagues short of the point visited last year.—In short, after considerable risks of being entangled in drift ice, and the most careful examination of both continents, every hope of a practicable passage was entirely abandoned. The great question was decided; but the benefits expected from the voyage were not attained. Captain Clerke, whose health had been long declining, at this time seemed much reduced; and he died before the return to the bay of Awatka. A short life of this officer is also subjoined.

Captain King next examines, with some attention, the Russian discoveries, and endeavours to compare them with his own. The promontory, called by Deshneff, Tschukotskoi Nofs, if this voyage was actually performed, was, he thinks, East Cape, from the situation and distance, mentioned by Deshneff, of those countries with which we are more acquainted. The author endeavours to establish two positions; first, that the promontory called East Cape, is, in reality, the most eastern point of that quarter of the globe; or, in other words, that no part of the continent extends in longitude beyond  $190^{\circ} 22'$  east; secondly, that the latitude of the north-easternmost extremity falls to the southward of  $70^{\circ}$  north. Each of these points he has, we think, conclusively established; and it also seems probable, that the coast of Asia does not any where exceed 70 degrees of latitude, before it trends more directly to the westward. If this be true, our voyagers were within  $1^{\circ}$  of this western direction; for their greater latitude

was

was only attainable in the mid channel; they could not approach the coasts higher than  $69^{\circ}$ . But we must not suppress our author's connected view of the obstacles which defeated the chief object of the expedition.

'The evidence that has been so fully and judiciously stated in the introduction, amounts to the highest degree of probability, that a north-west passage, from the Atlantic into the Pacific Ocean, cannot exist to the southward of  $65^{\circ}$  of latitude. If then there exists a passage, it must be either through Baffin's Bay, or round by the north of Greenland, in the western hemisphere; or else through the Frozen Ocean, to the northward of Siberia, in the eastern; and on whichever side it lies, the navigator must necessarily pass through Beering's Straits. The impracticability of penetrating into the Atlantic on either side, through this strait, is therefore all that remains to be submitted to the consideration of the public.

'As far as our experience went, it appears, that the sea to the north of Beering's Strait, is clearer of ice in August than in July, and perhaps in a part of September it may be still more free. But after the equinox, the days shorten so fast, that no farther thaw can be expected; and we cannot rationally allow so great an effect to the warm weather in the first half of September, as to imagine it capable of dispersing the ice from the most northern parts of the American coast. But admitting this to be possible, it must at least be granted, that it would be madness to attempt to run from the Icy Cape to the known parts of Baffin's Bay (a distance of four hundred and twenty leagues), in so short a time as that passage can be supposed to continue open.

'Upon the Asiatic side, there appears still less probability of success, both from what came to our knowledge, with respect to the state of the sea to the southward of Cape North, and also from what we learn from the experience of the lieutenants under Beering's direction, and the journal of Shalauoff, in regard to that on the North of Siberia.

'The voyage of Deshneff, if its truth be admitted, proves undoubtedly the possibility of passing round the north-east point of Asia; but when the reader reflects, that near a century and a half has elapsed since the time of that navigator, during which, in an age of great curiosity and enterprize, no man has yet been able to follow him, he will not entertain very sanguine expectations of the public advantages that can be derived from it. But let us even suppose, that in some singularly favourable season a ship has found a clear passage round the coast of Siberia, and is safely arrived at the mouth of the Lena, still there remains the Cape of Taimura, stretching to the  $78^{\circ}$  of latitude, which the good fortune of no single voyager has hitherto doubled.

'It



\* It is, however, contended, that there are strong reasons for believing, that the sea is more free from ice, the nearer we approach to the pole; and that all the ice we saw in the lower latitudes, was formed in the great rivers of Siberia and America, the breaking up of which had filled the intermediate sea. But even if that supposition be true, it is equally so, that there can be no access to those open seas, unless this great mass of ice is so far dissolved in the summer, as to admit of a ship's getting through it. If this be the fact, we have taken a wrong time of the year for attempting to find this passage, which should have been explored in April and May, before the rivers were broken up. But how many reasons may be given against such a supposition. Our experience at St. Peter and St. Paul enabled us to judge what might be expected farther north; and upon that ground, we had reason to doubt, whether the continents might not in winter be even joined by the ice; and this agreed with the stories we heard in Kamtschatka, that on the Siberian coast, they go out from the shore in winter, upon the ice, to greater distances than the breadth of the sea is, in some parts, from one continent to the other.

“ In the depositions referred to above, the following remarkable circumstance is related. Speaking of the land seen from the Tschukotkoi Nofs, it is said, “ that in summer time they sail in one day to the land in baidares, a sort of vessel constructed of whale-bone, and covered with seal-skins; and in winter time, going swift with rein deer, the journey may likewise be made in a day.” A sufficient proof, that the two countries were usually joined together by the ice.

“ The account given by Mr. Muller, of one of the expeditions undertaken to discover a supposed island in the Frozen Sea, is still more remarkable. “ In the year 1714, a new expedition was prepared from Jakutzk, for the same place, under the command of Alexei Markoff, who was to sail from the mouth of the Jana; and if the Schitiki were not fit for sea voyages, he was to construct, at a proper place, vessels fit for prosecuting the discoveries without danger.

“ On his arrival at Ust-janskoe Simovie, the port at which he was to embark, he sent an account, dated February 2, 1715, to the chancery of Jakutzk, mentioning, that it was impossible to navigate the sea, as it was continually frozen both in summer and winter; and that consequently, the intended expedition was no otherwise to be carried on but with sledges drawn by dogs. In this manner he accordingly set out, with nine persons, on the 10th of March the same year, and returned on the 3d of April, to Ust-janskoe Simovie. The account of his journey is as follows: that he went seven days, as fast as his dogs could draw him (which, in good ways and weather, is eighty or a hundred wersts in a day) directly toward the north, upon the ice, without discovering any island: that it had not  
been

been possible for him to proceed any farther, the ice rising there in the sea like mountains: that he had climbed to the top of some of them, whence he was able to see to a great distance round about him, but could discern no appearance of land: and that, at last, wanting food for his dogs, many of them died, which obliged him to return."

Besides these arguments, which proceed upon an admission of the hypothesis, that the ice in those seas comes from the rivers, there are others which give great room to suspect the truth of the hypothesis itself. Captain Cook, whose opinion respecting the formation of ice had formerly coincided with that of the theorists we are now controverting, found abundant reason, in the present voyage, for changing his sentiments. We found the coast of each continent to be low, the soundings gradually decreasing toward them, and a striking resemblance between the two; which, together with the description Mr. Hearne gives of the copper-mine river, afford reason to conjecture, that whatever rivers may empty themselves into the Frozen Sea, from the American continent, are of the same nature with those on the Asiatic side; which are represented to be so shallow at the entrance, as to admit only small vessels; whereas the ice we have seen rises above the level of the sea to a height equal to the depth of those rivers; so that its entire height must be at least ten times greater.

Their sails and rigging having been so long at sea, in various latitudes, and sometimes in bad weather, were by this time so much impaired, that they were not fitted to encounter this dreary and turbulent ocean. They therefore returned to Kamtschatka, and refitted in the best manner in their power. For the same reasons they were unable, though they frequently attempted it, to explore the northern parts of Japan. The southern extremity of Kamtschatka is in about 51 degrees of latitude, and is a remarkable point in these seas, which may in future be a fertile source of wealth in the way already mentioned. The demand for the sea-otter skins, in Japan and China, is considerable; and these skins are very numerous in Cook's river, which we have already suggested may be the future emporium, either by the intervention of the inland lakes, or some other leading to the Mississippi. The imported goods sold in Kamtschatka for triple the price they might have been purchased for in England.

And though the merchants have so large a profit upon these imported goods, they have a still larger upon the furs at Kiachta, upon the frontiers of China, which is the great market for them. The best sea-otter skins sell generally in Kamtschatka for about thirty rubles a piece. The Chinese merchant at Kiachta purchases them at more than double that price, and sells them again at Peking at a great advance, where a farther pro-



profitable trade is made with some of them to Japan. If, therefore, a skin is worth thirty rubles in Kamtschatka, to be transported first to Okotsk, thence to be conveyed by land to Kiachta, a distance of one thousand three hundred and sixty-four miles, thence on to Pekin, seven hundred and sixty miles more, and after this to be transported to Japan, what a prodigiously advantageous trade might be carried on between this place and Japan, which is but about a fortnight's, at most, three weeks sail from it?

But to continue the question; how great might be the advantages in purchasing them immediately in Cook's river? Captain King explains afterwards a plan nearly of this sort; but it is partial, and chiefly subservient to future voyages of discovery.

Of the few discoveries, in the subsequent part of the voyage, we shall mention only, that Jeso and Staten Island are probably the same lands which in other charts are styled the Three Sisters. This confusion has frequently arisen from the error of navigators, who, when they find islands in different parts from those which they had expected, generally distinguish them as new ones. The first, and sometimes the future reckonings, are erroneous, and occasion the mistake. Sulphur Island, as well as the islands to the north and south of it, seem to have lately emerged from the sea.

The earth, rock, or sand, for it was not easy to distinguish of which its surface is composed, exhibited various colours, and a considerable part we conjectured to be sulphur, both from its appearance to the eye, and the strong sulphureous smell which we perceived as we approached the point. Some of the officers on board the Resolution, which passed nearer the land, thought they saw steams rising from the top of the hill. From these circumstances, captain Gore gave it the name of Sulphur Island. A low, narrow, neck of land connects this hill with the south end of the island, which spreads out into a circumference of three or four leagues, and is of a moderate height. The part near the isthmus has some bushes on it, and has a green appearance, but those to the north-east are very barren, and full of large detached rocks, many of which were exceedingly white. Very dangerous breakers extend two miles and a half to the east, and two miles to the west of the middle part of the island, on which the sea broke with great violence.

The north and south islands appeared to us as single mountains, of a considerable height; the former peaked, and of a conical shape; the latter more square and flat at the top. Sulphur Island we place in latitude  $24^{\circ} 48'$ , longitude  $141^{\circ} 12'$ . The north island in latitude  $25^{\circ} 14'$ , longitude  $141^{\circ} 10'$ .

The

The south island in latitude  $24^{\circ} 22'$ , and longitude  $141^{\circ} 20'$ . The variation observed was  $3^{\circ} 30'$ , east.

In some of the more southern islands of the eastern ocean, particularly in Caracatoa, the voyagers found traces of their former acquaintance, the South Sea islanders; and we seem only to want a more extensive knowledge of the former, to render the similarity more striking and complete.—As our voyagers are now advanced to countries already known, and frequently described, we shall take our leave of this very important and interesting work. If in our review of it, we have not mentioned every thing curious and entertaining; if we have omitted many circumstances useful and important, the bulk of the work, and the number of facts of these kinds, must be our excuse. We have endeavoured to combine utility and entertainment, but have rather directed our attention to those objects, which tend to enlarge our knowledge either of geography or the operations of nature. There is one very important subject which we purposely omitted; we mean what relates to navigation and astronomy. These voyages abound with instructions of this kind, which it was impossible to preserve with the slightest pretensions to accuracy or information. Though the merely nautical details are less numerous than usual, and by no means interrupt the thread of the narrative, or diminish the pleasure of the general reader; yet, on many accounts, they are highly useful and extremely valuable. We are glad also to see that the time-keeper is found to be so accurate, as it appeared in this very extensive and complicated voyage.—There was no person particularly appointed to the department of natural history; but the attention and care of Mr. Anderson have, in a great degree, supplied that defect. Amidst numerous occupations, he probably could not be always equally careful; and, either on that or some other accounts, has seldom described, with a scientific accuracy, many natural objects which were found. In the higher latitudes, after his death, there are many references to Mr. Pennant's promised work, the *Arctic Zoology*: though it will, in some degree, compensate for the defect, we may be allowed to wish, that the number of *actual observers* had been increased by means of this voyage.

The Tables, in the Appendix, contain an account of the routes of the ships, in their whole course, various vocabularies, and the variations of the compass. Indeed the work itself, and its decorations in general, are so complete, that we readily forgive the delay of the publication, and join with ardour in the general applause.

Obser-



*Observations and Experiments for investigating the Chymical History of the Tepid Springs of Buxton. In Two Volumes. By George Pearson, M. D. 8vo. 8s. Johnson.*

OUR industrious author labours so earnestly, that he obscures his subject by the number of words employed to explain it. His terms and tedious circumlocutions contribute to the obscurity; so that after we had with difficulty pushed through the whole, we were scarcely able to explain either his views or his opinions, without the assistance of the recapitulation. He gives a satisfactory account of the soil and strata in the neighbourhood of Buxton: but these are not employed to explain the nature of the waters; and, on the other hand, his very careful and exact analysis is not very different, in its result, from those of Dr. Percival or Dr. Higgins. The description of the strata of this country, which Dr. Pearson calls the Anglo-Appennine, is accurate and entertaining; we shall therefore extract the inferences, as they contain the principal facts.

‘ 1. That the principal part of the substance which composes the earth in this region, has been formed by matter deposited from the sea; for the lime-stone beds that are supposed, with the greatest degree of probability, to be of marine origin, constitute by far the greatest portion of the earth, of the thickness of which we are acquainted.

‘ 2. That the Anglo-Appennine appeared first as a ridge of land above the sea, while the other parts of England were under water; because, it is presumed, that this region is the most elevated land in England.

‘ 3. That many of the present vales and ravines, with their rocks and cliffs, as well as the holes and caverns, have been formed by torrents of water, while the sea was retiring, or the ancient rivers contracting, and the dry land was increasing.

‘ 4. That subsequent to the formation of the British Appennine, beds of lava were produced between the strata, formed by depositions from water, either by the inflammation and fusion of inflammable strata, originally existing in the present situation of the toad-stone beds; or by liquid subterraneous fires, raised from depths lower than the parts in which they are now situated, and insinuated and cooled between the beds of lime-stone, leaving beds of a slag or scoria, known by the term of toad-stone; the properties of which substance, so far as hitherto known, we have above related \*.

---

\* \* The first of these opinions was suggested to me by a learned and ingenious gentleman, to whom philosophy is under great obligations for his researches, whose name I am not at liberty to mention. The latter opinion is well known to be that of Mr. Whitehurst.

The strata of lime-stone incumbent on, or subjacent to, the beds of combustible matter in a state of fusion, would be partially at least decomposed, or converted into quick-lime; but as the gas detached by the heat of the melted earths would be contained in the fissures and cavities of the earth communicating with the decomposed lime-stone, from the strong attraction between quick-lime and gas, the lime-stone strata decomposed would soon be restored to their original state of calcareous earth; but by the action of fire would probably have the figures of the sea animals of which they were formed wholly destroyed. One might also expect that the beds of clay, interposed between the strata, would be changed into brick by the subterraneous fires; and in this state they have been in some places actually found; but as the instances of this change are few, it is probable that some causes, operating for several hundred thousand years, have totally altered the form, and changed the properties of the clay so burnt; or, that the beds of that substance have been produced by causes, acting subsequently to the formation of the strata of lava.

That the most considerable and evident alterations in the external form and position of the strata of the peake, with which we are acquainted, have arisen from fractures of the beds of earth, in many parts of the country. In consequence of these, the horizontal or original situation of the strata is changed to that of being variously inclined to the plane of the horizon. In some parts, one end of fractured stratum is elevated much above the other end, and forms, perhaps, a vale with stupendously abrupt precipices on the one side, and on the other inclining much below the level of the opposite side. Sometimes merely the fractured end are separated, and form a chasm; at other times the fractured ends are concealed, by the openings being filled up with fragments of broken strata, and covered with soil: in some instances there is reason to believe the strata have been burst and opened, so as to entomb a great part of the superior beds, previously shivered into millions of pieces, which are now in a great measure missing; and from the inclined position of the strata, instead of finding the uppermost of one kind, which must have been primitively the case from their horizontal direction, we find it consists of all the various strata we know. Whether throughout the whole country there existed originally the whole set of strata above described, of which, in particular tracts, the uppermost are now missing, (either because they have been swallowed up by subsequent openings of the earth, or because they were originally wanting in those parts) is not clearly determined by any monuments of nature. We have no human records of the preceding events of nature, nor could we have any from the date at which they happened; but yet we conclude with certainty, that they have occurred.

We mentioned the analysis of toad-stone, by Dr. Withering, in vol. lvi. p. 328, and we then supposed it to be of volcanic origin. We have since found it at the bottom of a bed



bed of true lava; and, after being exposed to the action of air and water, pieces of it cannot be distinguished from scoria, or slag which has evidently been in a state of fusion. The state of the air and heat of the country, in the neighbourhood of the peak, are not ascertained by actual experiment; but we know, from its situation, that it is high and cold; subject to clouds, and frequently to rain.

In the experiments relating to the analysis, our author has not employed the terra ponderosa, or the saccharine acid; if he had been acquainted with the latter, he would not have found calcareous earth an uncommon ingredient in pure water, even without the assistance of the aerial or any other acid.

There is scarcely any water which can bear this test, without having its transparency disturbed. But the real fact seems to be, that the calcareous earth, though it strongly attracts fixed air, is seldom entirely saturated with it. Chalk will dissolve in pure water, and be deposited again on breathing into it; and this appearance will be more conspicuous the less interval has elapsed from its being dug from the earth: Bath stone too is evidently calcareous, without being saturated with fixed air.

Again, it is well known that this substance is soluble with a superabundant quantity of air; a composition which our author chooses to style, quick-lime and gas, compounded with gas. Chalk also frequently contains a portion of marine acid; and is on that account capable of being suspended in water.

Buxton water, analysed by Dr. Higgins, appeared to contain, in the Winchester gallon,  $17\frac{1}{2}$  grains of sediment, viz.  $11\frac{1}{2}$  grains of calcareous earth, combined with acidulous earth;  $1\frac{1}{2}$  grain of selenite;  $3\frac{1}{2}$  grains of sea salt;  $1\frac{1}{2}$  grain of marine salt of magnesia; and  $\frac{1}{8}$  grain of iron combined with acidulous gas, above the quantity necessary to sustain the earth.

In a water which is so pure and innocent, we need not dispute about trifles, except as a chemical question. We shall therefore only observe, that on comparing the experiments related by different authors, we think Dr. Higgins' analysis very near the truth. Dr. Pearson says that these waters contain no magnesia; but his thirteenth and fourteenth experiment, on which he grounds this opinion, are by no means decisive. If he had precipitated the calcareous earth by saluted terra ponderosa, and then added the fixed alkali, the event would have determined the question. The iron may very easily escape our notice, in the quantity mentioned; but it is of some consequence, on this subject, to transcribe the sentiments of an eminent chemist.

"I never examined any mineral water in which I found the metals combined with any other substance but vitriolic acid; and

I am certain many authors have been misled by not knowing this property of metallic salts, viz. that if we dissolve them in a small proportion of water, or if there be superfluous acid, the solution will remain perfect when exposed to the air; but if the acid be perfectly saturated with the metal, and the proportion of water to the metallic salt be very great, on exposure to the air it is decomposed, the metal being precipitated in the form of calx, and the acid being lost. This may easily be tried, by taking common green or blue vitriol, dissolving an ounce in three ounces of water by boiling, letting them stand to cool, and filtering the solution. If this solution be exposed to the air, it will remain perfect; but if we drop a drop or two of it into a wine glass full of water, in a few minutes the transparency of the water will begin to be disturbed, and the metal in a short time will fall down in a red powder, if it be iron; in a blue powder, if it be copper.

We can only urge, in opposition to this opinion, that when we have taken up chalybeate water from the spring, quite pure, with an intention to analyze it, if any circumstance has prevented the immediate experiment, there has been always an ochry sediment, unless it was stopped with uncommon care. This fact cannot be accounted for from dilution, or the escape of a common vitriolic acid: perhaps the water in the experiment mentioned, was not quite pure, the smallest proportion of uncombined lime, or of volatile alkali, no uncommon impregnation in the waters of populous cities, may have had the effect. Even the rain-water in a city shews marks of impregnation by the more delicate tests.

The vapour from Buxton waters is afterwards examined; and it is highly probable, from the experiments of Dr. Pearson, that a small part of it only is fixed air. There is some ingenuity in his contrivances to estimate the quantity of fixed air by that of lime water, which it saturates: by this means he finds that Buxton water contains about half the quantity of gas which is generally contained in the water of common springs. If we rightly understand our author, this quantity is enough to suspend the calcareous earth; but as we have already remarked, he contends for an affinity between it and water, without any other menstruum. The deposition of earth, after boiling, he thinks is not owing to the dissipation of the gas, for that appears equally conspicuous after long boiling as before; but happens merely in consequence of the diminution of the menstruum. On the whole then, our author's analysis is the following; a gallon of water leaves 16 grains of residuum, containing  $10\frac{1}{2}$  grains of calcareous earth,  $2\frac{1}{2}$  grains of vitriolic selenite,  $1\frac{1}{4}$  grains of sea salt. He found no iron, no phlogistic matter, and no salited magnesia.



The vapour of Buxton water appears commonly in a detached state; but these substances also admit of a chemical union, for our author finds that it bears nearly the same affinity to water as common air. It is not the aerial acid, but a phlogificated air, or, in Dr. Pearson's language, a compound of air and phlogiston. This is an elastic fluid, lighter than common air, unfit for respiration, probably from its inability to unite with any additional quantity of phlogiston. Yet the vapour from phosphorus unites with it; and though by long agitation the phosphorus ceases to shine, these combined airs inflame when exposed to the atmosphere. Fishes die in Buxton waters, seemingly from the heat rather than the contained vapour; but in them, as all other animals, custom produces considerable changes. There are certainly some instances in which fishes have been found to live in a greater heat.

It has been usual to attribute the appearance of air in waters entirely to fixed air; but our author corrects this idea, and observes, that it is only found in the acidulae. In the Bath waters, and some others, a portion of this air was before found to be phlogificated vapour. In the analysis of Dr. Higgins, a Winchester gallon of the water is said to contain four ounce measures of phlogificated air, and two ounce measures of acidulous gas; that is,  $\frac{1}{2}$  of phlogificated air, and  $\frac{1}{4}$  of gas. In that of Dr. Pearson, the gas is about  $\frac{1}{3}$  of the bulk of water; and the vapour, which consists of equal parts of common and phlogificated air, equals  $\frac{1}{4}$  of the whole. On this subject we are unable to decide. It is probable the quantity of gas itself is variable; or the time in which the water was taken up unfavourable. Our author pursues his enquiry into other properties of this compound; but our limits will not permit us to follow him.

Dr. Pearson next attempts to solve a problem, which we fear is at present beyond our powers, that is, the cause of the heat of warm springs. We shall not tire our readers with the various hypotheses that have been framed, but only mention that of our author. He thinks, from the quantity of combustible matter in the earth, inflammation may go on for ages, without any considerable diminution of the substance. This inflammation may be first occasioned by the accidental decomposition of pyrites, which it is well known produce heat; and the heat is kept up by the assistance of the dephlogificated air, which must be extricated. To account for the uniform temperature, he supposes that the heat is sufficient to convert the water into vapour; and we then know that its heat may be greatly increased, if the containing substance is able to

resist its expansion. In this way, it may flow to a considerable extent before it is greatly cooled, and may even appear at the surface nearly as hot as boiling water; but if it comes only from a certain distance, and the inflammation is uniform, it will gradually heat the earth around, and consequently the diminution of the heat will be constantly the same. This theory too explains the origin of the vapour, and the great purity of the water; since, in its progress, it actually undergoes a distillation. We confess that the many postulata in this system, in our opinion, are powerful arguments against it; but, in a subject so difficult, it is no disgrace to err. We would only suggest to our author, that the vicinity of springs, of the common temperature to those which are warm, are a strong objection to his system; and we know no way of avoiding the difficulty, except we conclude that this tepid distilled water comes from a great depth. It is certain that springs in general are comparatively superficial; so that, though apparently near, they may really be distant: but we ought not to make an objection, which must equally militate against every hypothesis.

The spontaneous inflammation of black wad is mentioned in the additional notes, as a means by which these subterranean fires may have been kindled; and this fact, together with the production of dephlogisticated air to support the flame, are mentioned by an able chemist with the same view. Dr. Pearson failed in the experiment; we shall therefore describe the method which succeeded in our attempts. To half a pound of black wad, well dried and again cooled, were added two ounces of linseed oil, and they were incorporated well together: the mixture was irregular and clotty, and the whole took fire in about forty minutes. One hundred parts of black wad were found by Mr. Wedgwood to contain 43 parts of manganese, 43 of iron, 4-5 of lead, and 5 of mica. The remainder was fixed air, by which the manganese is very generally mineralized, and some water.

Our author does not enlarge on the medical history of this water; he only remarks, that its good effects probably result from the heat, viz. that of 82° of Fahrenheit, and the phlogistic vapour. The latter inviscated by a mucilage of gum arab. and drank, produced sickness at the stomach, pain and giddiness of the head. We shall select his method of imitating this water with success.

We are by this history instructed how to compose a water resembling Buxton water in its temperature and impregnation, in the following manner:

Disfil



Distil a quantity of common hard spring-water in a gentle heat, in perfectly clean glass-vessels, so as to have neither smell nor taste; or if it should acquire a smell by distillation, remove it by exposure to the open air.

To thirty-two ounce measures of this distilled water in a quart bottle, or in a large Florentine flask, add about fourteen grains of the purest chalk in fine powder; and four grains of vitriolic selenites, composed by saturating quick-lime, precipitated from lime-water by gas, with vitriolic acid. Expose this mixture in a sand-heat of about  $140^{\circ}$  or  $155^{\circ}$ , and after it has stood in this situation a week, or longer, during which time it has been frequently agitated, add about four grains of the purest sea salt; then boil this mixture in the flask, or in a vessel of silver, so as to separate from it all the air it contains, and filter it through paper, previously washed, by filtering through it hot distilled water.

Divide this filtered solution into four equal parts, one of which must be contained in a wine-quart bottle; to each of these parts add  $\frac{1}{2}$  of a quart, or as much as will fill these quart bottles, of the above distilled water, previously boiled in a Florentine flask, or in a clean silver vessel, so as to have expelled all the air dissolved therein, and agitate a short time each of these bottles. Then invert each of these bottles in a tub of common hard pump-water, and add thereto half an ounce measure of a mixture of one part of common air, and two parts of the compound of air of phlogiston, (formed by exposing air to a mixture of iron-silings and sulphur); then cork the bottles while inverted, and after agitation frequently, and preserving them in an inverted position out of the water for three weeks, a month, or six weeks, upon withdrawing the cork from the bottles inverted in the tub of water, the permanent vapours will be found dissolved or suspended; for water will rise within the bottles to occupy the place of these substances.

During the time these bottles are inverted and uncorked in the tub of water, as little motion should be used as possible, in order to prevent the mixture of the water of the tub with that of the inverted bottles.

The compound of air and phlogiston used upon this occasion should be deprived of smell and taste, by repeatedly transferring it through water.

On the whole, though we have not always agreed with Dr. Pearson, we commend his industry and ingenuity. Several chemical facts, interspersed in these volumes, are highly interesting. We wish that his language was more clear and concise: we wish too, that he had preferred common terms to a more tedious, though sometimes more accurate periphrasis. We distinguish, in many places, the eagerness of a young man; but we are forbid to expect the harvest, 'dum seges est adhuc in herba.'

*An Essay on the Waters of Harrowgate and Thorp-Arch in Yorkshire; containing some Directions for their Use in Diseases. To which are prefixed, Observations on Mineral Waters in general, and the Method of analysing them. By Joshua Walker, M. D. 8vo. 1735, second Edition.*

**T**HIS Essay is in general an exact account of the nature of these celebrated waters; but our author is not acquainted with some of the later improvements in chemistry, or the discovery of many new precipitants. The following method, for instance, is vague and uncertain, while the vitriolic acid is immediately and certainly discovered by means of salited terra ponderosa.

When the vitriolic acid is in a state of combination with an alkali, an earth, the inflammable principle, or metallic body, it may be discovered by a solution of lead in the nitrous acid, not quite saturated. The lead will not then be precipitated, either by an alkaline salt, or calcareous earth; because the superfluous acid will saturate these, and will also prevent the precipitation of a metal. This will not, however, hinder the lead from uniting with the vitriolic acid, nor from forming with it a substance incapable of solution in water; and which, on that account, always renders the mixture turbid, and causes a precipitation.

The result of Dr. Walker's experiments on Harrowgate water, are not very different from those of other chemists. He observes that it is slightly impregnated with hepar sulphuris, or with an alkali, though this is rather doubtful; common salt, in the proportion of fifteen drachms to a gallon; calcareous earth, twenty-six grains to a gallon; a small quantity of selenium; and sulphureous vapour, in a large proportion. On this subject we can only observe, that alkali was suspected, from its changing syrup of violets to a greenish colour, after long standing; but this is extremely uncertain, since common salt will frequently produce the same effect. Our readers are now sufficiently acquainted with the nature of hepatized waters, and we think that Dr. Walker has arrived at the conclusion of Bergman, without any assistance. He has made the discovery without being fully aware of it, and has detected nature in the act of impregnation. He found that, when the vapour had been decomposed by the air, in evaporating the water, that vitriolic acid re-produced the smell.

I have ventured, says he, in the foregoing pages, to throw out a supposition, that it is probable sulphureous waters of the volatile kind, may receive their impregnation from a decomposition of hepar sulphuris, by means of the superabundant  
acid



acid contained in aluminous slates. That this is the case with the mineral water which is the subject of our present enquiry, I am induced to believe, from an examination of the soil in the neighbourhood of the wells. The master of the Half-Moon Inn, at Low Harrowgate, had occasion, this year, 1783, to dig for fresh water in the field behind his house; but, contrary to his expectations, the water he met with was so far from being pure, that it very nearly resembled the water at the sulphur-wells, both in taste and smell. In the soil, which had been taken out in digging for this spring, I found some slates, which were so fully saturated with aluminous liquor, that being put on a hot iron, they swelled out into larger pieces, and exhibited to the eye, and afforded to the taste, every property of calcined alum.

He has only not completed the discovery, by omitting to precipitate the vapour, by means of the nitrous acid. We presume it is well known that alum commonly contains a superabundant acid.

The water of Thorp Arch contains 1. Inflammable air.—2. Fixed air.—3. Muriatic salt, in the proportion of an ounce to a gallon.—4. Calcareous earth, and 5. Selenitical earth, together gr. xvi. in a gallon.—6. A small portion of iron suspended by fixed air.

The author's account of the use of the water in diseases, may be useful; but we fear its virtues are exaggerated. On the whole, this little tract deserves attention; and we think that a careful revival might still add to its merit. In the chemical part we would recommend a more particular examination of the nature of the vapour, in order to ascertain whether it really contains hepar sulphuris in solution, which we think highly probable, and a more careful examination of the residuum.

---

*History of the Absorbent System. Part I. Containing the Chylography. By John Sheldon, Surgeon. 4to. 1l. 1s. in Boards. Cadell.*

THE present work is a very favourable specimen of Mr. Sheldon's accuracy, ingenuity, and candour. It is well known that this part of anatomy is yet very little understood; though we see absorbents in many parts of the human body; though we perceive the organs with which they are usually connected, in others, so that the general position of their universal distribution is established with sufficient certainty; yet the strictest search cannot always discover the vessels themselves. We have still to learn, whether the important organ of the

the brain is supplied with these very necessary appendages. There are many reasons, both from analogy and pathology, to think that this is really the case; but the absorbing vessels have never yet been discovered. In this volume, our author only describes the lacteals; but he intends to examine the lymphatics of the different organs, and of the extremities. His descriptions are accurate, and the plates uncommonly beautiful, expressive, and clear. We have seldom seen such masterly execution, in this department, as the second, third, and fourth tables.

After Mr. Sheldon has described the methods of finding and preparing these minute and transparent vessels, which will be a valuable acquisition to the practical anatomist, since instances of such candour are not very frequent, he gives the history of the discovery of the lacteals. We shall not enlarge on this subject, for it contains nothing very new, except some just remarks on Vesslingius; but we have discovered no omissions or errors. He next describes the lacteals: we shall give our author's description of the coats of these vessels, since it is in a great measure new; as well as to point out a slight ambiguity which occurs, respecting the structure of the peritoneum. It seems, from the account, that the latter membrane is the compacted cellular texture; yet the fibrous appearance is before adduced as a proof of the muscular structure. If the author means that the peritoneum also is composed of three coats, like the veins, he has not expressed his opinion very clearly.

It has been supposed, on account of the transparency and tenuity of the coats of these vessels, that it is impossible to determine their number and structure. I flatter myself, however, that I can venture to speak decisively to those two points. That there is a dense internal coat, which is smooth and polished on the inside, is evident to all anatomists; it is connected by a reticular substance on its outside to the internal surface of the middle coat. This fine internal membrane prevents the transudation of the lymph and chyle, and produces certain duplicatures internally, which form the valves, found in every part of this system; and it is exactly similar to the internal coat of the veins. The second coat, I apprehend, consists chiefly of muscular fibres, running in every possible direction; the greater number take the circular direction, and surround the internal membrane. These circular muscular fibres I have seen in the thoracic duct of the horse; in which animal the duct is as large as the little finger. We can also separate an outer coat, which is made of a membrane similar to the pleura, or peritoneum; after this we distinguish the fibrous middle coat, particularly the cellular fibres, and under that the internal coat. The experiment will succeed best if the thoracic duct of this animal,



animal, or a large lacteal from the great intestines, be drawn over a glass tube, of such a size as to require the vessel to be somewhat dilated, in order that it may pass over the tube. By this contrivance, I have seen the external coat slit in the longitudinal direction, while the vessel was on the tube, and the middle muscular coat, as well as the internal coat, have been thus distinguished. Hence arises the greater necessity for those valves which are found in every part of this system in the human subject, in the more perfect animals, as they are called by anatomists; and even in the turtle, among the class of amphibia.

The coats of these vessels, in respect to number and structure, appear to me to be analogous to those of the arteries and veins. In these last I can distinguish in many animals, particularly in the turtle, the three coats I have described, by making a transverse section of any large artery or vein near the heart of this animal, and even in some of these vessels that are at a distance from the heart. In the spermatic arteries, in the gravid uterus of the cow, and in some arteries of the human body, I have for a long time exhibited such specimens in my anatomical courses of lectures. I can likewise demonstrate, that the external and internal coats of the vessels are chiefly composed of the surrounding reticular substance compacted; and shall take this opportunity of observing, that the pleura and peritoneum are formed in the same manner. In some parts of the last mentioned membrane, I have long since exhibited in my lectures a fibrous appearance, evidently discernible by the naked eye. From a number of experiments indeed, which I have lately made in the human body, but particularly in the dissection of large animals, such as the horse, ass, &c. I am more strongly convinced that Haller has great reason to assert, that the reticular membrane is the basis, perhaps, of the whole of the fibres of animal bodies; but a farther discussion of this point at present, would be foreign to my purpose.

The structure of the valves is now generally known; yet it is remarkable that they are not perceived in the lymphatics of fishes, though they are very frequent in those of the amphibia. Mr. Sheldon accounts for the defect, from the necessity the latter are under of taking in fresh air; but this is by no means satisfactory, as the action of respiration on the lymphatics is partial. Perhaps the lymphatics of fishes are more irritable than those of breathing animals; they are certainly less subject to occasional obstructions. We commonly perceive, where the action of the neighbouring muscles is constant and uniform, that valves are much less frequent than where it is more varied, irregular, or where impediments sometimes occur. In all these respects, there is a very material difference in the economy of fishes from that of the amphibia, or more perfect animals; and these may occasion the difference. The

extremity of the lacteal we have already described, from Lieberkuhn, in the fifty-fifth volume, page 103. It is remarkable that each vessel proceeds on the intestine in the direction of its axis, for some time, and then usually turns off to the mesentery at different angles; but seldom at any very obtuse ones. On the mesentery they run in serpentine directions, and passing through successive glands, reach the thoracic duct, as commonly described. We have mentioned these circumstances, though generally known, to add, from our author, that the lacteals perform the office of lymphatics in the interstices of the intestines, and to remark also, the peculiar care with which nature assimilates the chyle, to prevent any injury from imperfect animalization, or tendency to putrefaction. We have seen, from Lieberkuhn, that every ampullula is attended by an artery; and it is highly probable, that on the internal surface of each lacteal, a fluid is secreted. On this account, every portion of chyle is blended with animal matters; and this mixture must be more complete when its tract is extended. It is certain also, that the chyle is poured into cells in the glands, where it stagnates for some time, and is probably diluted by the secreted fluids of the organ. We can plainly see that this is one of the purposes of the stagnation, for the glands are much more numerous in the ileum than in the duodenum, as if the purer parts, first extracted, required a more slight elaboration.

Mr. Sheldon has very properly described the several anastomoses of the lacteals, which prevent a total deprivation of nourishment, though the glands are obstructed. But we do not perceive a circumstance, either in his description or his plates, which we have sometimes observed. When a lacteal arrives at a gland, it sends little branches perhaps into it; but the greater part of the fluid seems to pass in a continuous vessel to join with those vessels which usually carry the lymph from the gland. There is an appearance which slightly resembles it in one of the tables, viz. table IV. but we cannot perceive the vessel continued. In one instance, where the lacteals were remarkably varicose, the quicksilver, from the injecting pipe, passed through the whole course, and ran out of the jugular vein. This circumstance is very uncommon.

The thoracic duct was found full of calcareous earth, by Mr. Cheston of Gloucester, in a man who had a spina ventosa on the os ilium, so that the cavity of the duct was totally obstructed, for a considerable length, with ossific matter, and would not suffer air to pass upon endeavouring to inflate it from the part below the obstruction, to the part above. We have in this case an instance of calcareous matter being absorbed,



forbed, and found in the trunk of the lymphatic system: from which some persons have inconsiderately concluded, the man in this case being apparently well nourished, that the lacteals, or thoracic duct, had other terminations in the venous system, below the obstructed part; there being no other way to account for the nutrition received in this instance, when the duct was obstructed below the terminations at the angle between the jugular and subclavian vein. I am of opinion that the chyle and lymph, brought up by the thoracic duct, to the part immediately below the obstruction, now conveyed by the collateral anastomosing branches, to that portion of the duct above the obstructed part. These branches nature has given in greater plenty in the absorbent system than in the arteries or veins; which I shall prove by direct experiments in the course of this work.

This passage was selected on account of one which follows.

These lacteal anastomoses are found in every part of the absorbent system, and they are of the utmost importance in the animal œconomy; for should the glands, with which these vessels communicate below, be obstructed, the anastomosing branches will still convey the chyle or lymph to the vessels above the obstructed gland, and this is most undoubtedly the case, in the *tabes mesenterica*. The cells of the glands, in this affection, are filled with a curd-like substance, and sometimes with calcareous earth; and in many subjects labouring under this complaint, I have found all the lacteal glands intirely obstructed, so that when I injected the lacteals, I could not make a single particle of the quicksilver pass into the cells of the glands; but the vessels above the glands, in this instance, were injected with the greatest facility, from the vessels below the same. This is a proof that the collateral branches were increased in size, which was indeed apparent; and that they had conveyed the chyle, to the thoracic duct, without its passing through the glands.

Since the alteration which the chyle undergoes in healthy subjects, cannot take place in these distempered habits, because the cells of the glands are stuffed up, and the chyle is prevented from entering into them; may we not readily account for the subject becoming impoverished, thin, and consumptive in these cases? We are likewise to suppose, that these collateral branches alone, are not sufficient to convey the chyle to the thoracic duct, in such quantities, as to nourish the body. These anastomoses, however, as I have observed in a former part of this work, will account for the way in which the chyle was conveyed, into the sanguiferous system, in that extraordinary case mentioned by Mr. Cheston of Gloucester, and which I have before quoted.

We can only repeat, that we have received great satisfaction from the present specimen, and shall return to the subsequent parts, when they are published, with considerable pleasure.

*Letters to a young Gentleman, on his setting out for France. By John Andrews, LL.D. 8vo. 6s. Walter.*

Professed book-makers want only an engaging title-page; they can direct travellers from their closets, and instruct in sciences, with whose principles they are unacquainted. Our present author instructs his pupil in French literature, and points out the most remarkable objects in the metropolis of France; though there is some reason to suspect, that he is equally acquainted with both, through the medium of a translation, or the descriptions of a former traveller. Any Englishman, with little knowledge of the language, can declaim on the comic humour of Molière, and the elegant precision of Boileau; on the judgment of Montesquieu, and the comprehensive exactness of Crousaz. Without the inconveniences of a journey, we know that one church is of a sublimely Gothic, and another of an elegantly Grecian architecture. In short, to come at once to our subject, there is so little discrimination in our author's accounts, there is so little feeling in his descriptions, that we consider him rather as a copyist than a spectator. What is heard or read scarcely affects the mind, compared to those vivid perceptions, which are caught at once from the object, and kindle an enthusiastic warmth.

Books are indeed frequently, if not most commonly, a repetition of each other; they often serve to confuse and perplex, instead of affording elucidation. These are our author's own words, who seems not to be aware that they may be applied to himself.—*Mutato nomine de te fabula narratur.*

The flimsy texture of this volume, which, with very little matter, is extended through near six hundred pages, with the assistance of well-known, and frequently mangled, anecdotes, and uninteresting adventures, prevents us from entering into a particular discussion of any part. We shall select a passage, taken with little choice, that we may not be suspected of an improper partiality. It is a sufficient specimen of the emptiness of our author's pages.

There are several tombs in the church of Notre Dame, very deserving of notice, chiefly for their antiquity, and the persons whose remains they contain.

Of all improprieties, none is more deserving of censure, than that of burying individuals of no substantial merit, in places that ought to be set apart for perpetuating the memory of



of those who have done real honour and service to their country.

When we see persons noted for nothing but their wealth, entombed among those from whom a nation derives its glory, it raises a just indignation in every bosom that feels for the dignity of the public.

But it produces a much worse effect in the opinion of all discerning men. It extinguishes that thirst of fame which is the most powerful incentive to signalize themselves in men of great minds and extraordinary parts.

What vigour and alacrity can we suppose them to feel, when they see the same honours paid to insignificant as well as to exalted characters, when they see the most deserving individuals laid in the same dust with those, whose pecuniary worth alone could purchase the breaking of ground for their reception.

People should be peculiarly vigilant in preventing this reward of public merit from being liable to such manifest prostitution: it is often the sole recompence bestowed upon individuals, to whose abilities, heroism, or genius, a nation owes much of its grandeur and reputation.

It is hard therefore, they should share it in common with such as have no pretensions to it. Public honours are a property which ought to be more sacred after the death than during the life of such as have a right to them: it is all that national gratitude has in its power to confer: it belongs to them exclusively; and it is the highest injustice to allow any others a participation.

On the subject of French Literature, we shall select our author's character of the different historians. It is really the most unexceptionable part of his work. Many of these characters have indeed been again and again repeated; but each constantly deserves attention: if the tenth repetition will not please, it may at least profit.

The first French book of this kind I would earnestly wish you to read, is *Discours sur l'Histoire Universelle*, by Bossuet. It is a chronological account of the world until the close of the eighth century. It is written with great eloquence, and is full of learning and instruction.

*Les Discours sur l'Histoire Ecclesiastique*, by Fleury, is another object I must point out to your attention. They are the very pith and essence of all that is worth knowing on this matter. Peruse them with care and diligence, and do it more than once.

His *Traité de Etudes* claims also your notice. It is an historical abstract of the ancient methods of studying, with excellent directions what books, and in what manner to study.

The History of France, by father Daniel, is the best extant. I do not propose him as a faultless writer: but he is to-

pious,

pious, exact, and, considering his situation in life, more impartial than could almost be expected. His style is correct and flowing; and though not remarkable for energy, is clear, unaffected, and altogether very pleasing.

'A work which, for its intrinsic and evident utility, claims a high consideration in the republic of letters, is the *Ancient History*, by Rollin. If any man deserved well of youth, it is certainly he. No one has so greatly facilitated the means of that knowledge which becomes a gentleman. He wrote with an eloquence and dignity befitting his subject; and well deserves the words I have seen under a print of him, *lege et relage*. Forget not Crevier, the elegant continuator of his *History of Rome*.

'Rapin Thoiras should be read by an Englishman on two accounts: he has written the history of our country; and he has done it with impartiality. His style is rather dry and frigid; but his judgment and penetration make ample amends.'

We have selected this passage only as a specimen. Dr. Andrews also commends father Orleans, Vertot, Henaut, St. Real, Tillemont, and several others. It must indeed be allowed, if we do not except to his different characters, that he has given them their full measure of praise, pressed down, and running over.

The language is adapted to the subject; full of sound, and empty of meaning. There are a few improper words, and some of French extraction, which might lead us to suppose that, in the literary part, he has sometimes drank from the fountain head. *Rivality* and *judiciousness*, are not English: '*actual*,' instead of '*present state*,' is an intruding stranger, who seems eager to become a denizen, and will probably succeed. We can only enter our protest against it, and against publications of this kind, where a few useful instructions are to be selected from a mass of trifling and uninteresting materials.

---

*An Address to Bryan Edwards, Esq. containing Remarks on his Pamphlet, entitled, "Thoughts on the late Proceedings of Government, respecting the Trade of the West India Islands with the United States of America". By John Stevenson. 8vo. 1s. 6d. Nicoll.*

THE regulation of the trade between our West-India islands and the American States has afforded subject for much controversy, and the writers on each side have either urged strong arguments in favour of their respective opinions, or endeavoured to refute such as had been advanced by their antagonists. Lord Sheffield stands foremost in the dispute, both



in point of priority and importance. Among those who maintain opposite principles, Mr. Edwards is one of the most conspicuous champions; and, in answer to him, the present writer, who agrees in sentiment with lord Sheffield, supports the contest with an acuteness of observation, and a force of reasoning, which is likely to prove decisive. But that our readers may be enabled to judge for themselves, we shall lay before them a few extracts from the pamphlet.

‘ In the next paragraph (says Mr. Stevenson) you modestly tell us, that you will not presume hastily to condemn the measure which was adopted in the place of the American Trade-bill. “ I allude (say you) to the act which empowers his majesty in council to regulate the trade with America in such a manner as shall be thought most expedient and salutary. It seemed not unreasonable, it must be owned, that some engagement should be required, on the part of America, in return for certain indulgences, which she will probably expect from Great Britain; and I take for granted that considerations of this nature induced parliament to vest a discretionary authority in the privy council.”

‘ That some engagement should be required on the part of America, in return for *certain* indulgences which she may probably expect from Great Britain, seems highly reasonable; but pray, sir, allow me to ask, what right have the United States of America to expect certain indulgences from Great Britain? and what security could the latter have for the true performance of any engagement on the part of the former? We know that the Americans, in every instance where their apparent interest laid them under any considerable degree of temptation, have proved exceedingly deceitful and perfidious to this country. Were Great Britain to grant *any* indulgences to America, they would doubtless be *certain* indulgences, because she had granted them; but we have every reason to believe, that the United States of America would not regard their engagements with us, any farther than the powerful motive of self-interest induced to the performance. Some perhaps will say, that the former behaviour of the Americans toward this country, can afford no certain rule for us to judge of their future conduct; that they are “ now a great and independent nation,” and must see it their interest, as well as honour, to support their national character. Even supposing that the Americans were in their future transactions, to become more careful to preserve their public honour, yet Great Britain might nevertheless doubt, whether such a necessary reformation in their public conduct would be suffered to materially affect their engagements with her: and supposing it were fully proved that they are heartily disposed to enter into a commercial treaty with Great Britain, on the principles of real reciprocity, it would still be necessary for us to ask, what have the United States of America to give,

in return for those *certain* indulgences which you say she will probably expect to receive from this country? In the present situation of things, sir, it is fair for me to suppose, that the Americans have nothing to give, unless it be such articles as France, Spain, Portugal, and Holland, have previously refused; on account of their being deemed either improper for their markets, or too worthless for their acceptance.

I readily grant, sir, that the intercourse and reciprocal exchange of commodities which formerly subsisted between our fellow-subjects in the West India islands and those of the now United States of North America, was of so beneficial a nature to all concerned, as to claim the most unbounded encouragement from Great Britain. At that time the parties stood equally related to us, and it was clearly our interest, as well as our duty, to encourage and protect both; but the bonds of union, between Great Britain and her late colonies, having been wholly dissolved by the late treaty of peace, they ought now to be considered, not only as alien, but as rival states: their alliance with France has placed them in the most unfavourable situation, respecting the British empire, and rendered it highly necessary for us to do every thing in our power to prevent their becoming formidable. With respect to our West India islands, they are still part of the British empire, and their inhabitants, by continuing to profess due allegiance to their lawful sovereign, are entitled to our utmost exertions in their behalf. I admit, sir, that the grand objects of the West India planters, in their trade with the Americans, were, the obtaining of food for the hungry, materials for their buildings, and packages for the conveying of their staples to Great Britain: but I flatly deny that, without such sustenance, the inhabitants of those islands must have unavoidably suffered the miseries of famine; or that, without their materials for buildings and packages, the whole of the *immense* cultivations of our West India islands must have stopped. I freely admit, however, that no man, in the full possession of his reason, will raise, at a great expence, commodities which he can neither consume himself, nor sell to others. I think I am sufficiently warranted to say, that Great Britain, Ireland, Canada, and Nova Scotia, can well supply all our West India islands with provisions and lumber; and, supposing the price of the several articles to be higher than they formerly were, the price of the planter's produce will rise in proportion, and the burthen must fall ultimately upon the consumers of that produce.

In regard to the supposed loss of the West India planters, from a prohibition of their trade with the United States, our author thus argues.

‘Although our West India planters may in some degree suffer, by the prohibiting of their intercourse with the United States of America, I am of opinion, that they will not be very  
ma



materially injured by it, at least for any length of time. If the American trader could afford to pay liberally for our West India produce, because he dealt on barter, and for an homeward freight, is it not reasonable to suppose, that the case will be nearly the same with those who shall in future supply the sugar planters with such lumber and provisions as may be wanted? The British market is, I believe, the highest in Europe for West India produce; and, instead of being glutted, we have often experienced either a real or an artificial scarcity, even at times when sugar and rum were at an exorbitant price. However enormous our duties may be deemed, they are certainly paid by the consumers; and the worst that can thereby happen to the planter is, the lessening of the consumption. As to that part of his staple commodities which you say must remain a dead loss on the planter's hands, unless he can sell it to America, I would just observe, that our remaining colonies will, in future, take a much greater quantity of rum than they formerly did, and that, were the planters to re-distil the remainder of that which you say is fit only for the American market, it would fetch about two shillings per gallon in ours; which price, with the savings in the articles of freight and puncheons, would yield nearly as much profit as the other. After saying that part of the planter's produce must remain a dead loss on his hands, you add, "It is therefore cruelty and insult to tell him of supplies in Great Britain, if he has not wherewithal to purchase them. There may be corn in Egypt, but there is no money in the sack's mouth." Can that, sir, be deemed a *well authenticated fact*? or is it mere declamation, calculated to mislead your honest, but incautious readers! By what rule of reasoning can the telling of the West India planter, that there are supplies in Great Britain, be called *cruelty* and *insult*? Because, say you, though there may be corn in Egypt, there is no money in the sack's mouth! Here, sir, you seem to have quite forgot your observation on the necessity of obtaining materials for the package of their principal commodities, sugar and rum. In page 9, you tell us, "That the quantity of those articles annually shipped to Great Britain exceeds in value the sum of three millions of pounds sterling." Surely, sir, an annual sum of more than three millions sterling may be deemed *some* money in the sack's mouth, when the corn in Egypt is to be purchased: but whether any thing short of a free intercourse with the United States of America, will prove satisfactory to our West India sugar planters, and their *patriotic* friends here, I shall not, at present, take upon me to determine.

In giving an account of this dispute, in which the interest of the nation is so essentially concerned, we have hitherto refrained from interposing any opinion, as the positive knowledge of many facts and local circumstances is indispensibly necessary towards forming a determinate judgment on the sub-

ject. But had this writer supported his doctrine as much by determinate information as he has done by acuteness of argument, we should not hesitate to affirm, that the prohibition of a trade between our West India islands and the American States is a measure of the most salutary consequence to the present interests, and ultimately to the safety of the nation.

*Opinions on interesting Subjects of Public Law and Commercial Policy; arising from American Independence. By George Chalmers. 8vo. 3s. Debrett.*

THIS production begins with an enquiry, whether the citizens of the United States are considered by the law of England as aliens; what privileges they are entitled to within the kingdom; and what rights they can claim in the remaining colonies of Britain. These questions, which lead to conclusions of the most interesting nature to both countries, are examined by the author with great precision. He observes that the treaty of peace between Great Britain and the American States is sufficiently explicit with respect to the political associations that compose the states, which are acknowledged to be free and independent; but it is altogether silent as to the individuals who formed those confederations. He admits the thirteen societies, in their associated capacity, to be sovereign, by relinquishing all claim of government over them; but it does not explicitly renounce the allegiance of the colonists, who, at the epoch of the peace, were still British subjects, in the contemplation of British law. It does not declare, that the citizens of the United States shall be deemed aliens in future; and it as little marks any exception of those faithful subjects, who, having refused to renounce their allegiance, were denominated *nonjurors*, by the American code; and who, having never done any act inconsistent with their fidelity to the crown, merited at least, by their hazards, the accustomed stipulation, that they might dispose of their property, without hindrance, and afterwards retire without farther persecution. The distinction, made by Mr. Chalmers, between those of the Americans who actively and voluntarily renounced allegiance to the British government, and such as were otherwise inclined, is certainly founded in justice; however singular the situation must be acknowledged, that, of the inhabitants of the United States of America, a part is become entirely alien in respect to Great Britain, and a part, as never having violated the laws of this country, must still be considered as entitled to the privileges of British subjects. Mr. Chalmers describes, with great perspicuity, the different situations of these



two classes, the claims of which he discriminates, both upon the principles of law, and examples deduced from history.

The confusion in policy, says our author, in law, and in practice, which must result from the uncommon circumstances of two distinct classes of men, residing in the same country, yet pretending different rights, within a foreign nation, are all apparent, and ought all to be precluded, by measures of precaution. To a state of anarchy, thus new and embarrassing, it is unnecessary to add, that it has been found sufficiently difficult to man our navy, during the civil war, from the seamen insisting, that, since they had been born in America, they could not be pressed to serve. The business of our custom-house requires no further perplexities, from the difficulty of knowing aliens from subjects, under a complicated system, which by the contradictory operation of new laws becomes daily more complex.

Men of cautious tempers may be induced by the foregoing reasons to think, that a legislative declaration is necessary, to remove doubts, and to prevent difficulties. It would require only a few words in an act of parliament to declare, that the citizens of the United States are aliens to the crown; and to provide, that all persons who had been once British subjects, and resided within any of the United States, before or at the ratification of peace, shall be deemed British subjects, on condition that such persons shall before, or on the day of settling in any of the dominions of the crown, and take the oath of allegiance.

Mr. Chalmers very justly expresses great approbation of the act of parliament, empowering the king in council, during a short term, to make temporary regulations for the American trade. He observes, that by avoiding the dangers of over credulous haste, it furnished the intelligent with opportunities of reviewing a subject, complicated by a consideration of contradictory laws, and by a regard to domestic policy, as well as to foreign interests. That our author does not over-rate the salutary operation of this act, appears evidently from the view which he takes of our transatlantic trade, both in exports and imports, as regulated by the late proclamations. He scruples not even to affirm that, in consequence of this measure, the American commerce has been turned into a more favourable channel than that in which it had formerly flowed, when the United States constituted British colonies.

Mr. Chalmers argues, with equal justice and force, on the claim of the United States to a free trade with the British West India islands.

The proclamation of the 2d of July 1783, which permitted British subjects to transport, in British ships, the West-India

commodities to the United States, and to carry their most useful products in return; which thus conferred many benefits on the United States, though not every benefit; has been declared by some of those States "to be inconsistent with the rights of free trade." The American governments then, not the American mobs, claim the right of free trade with the transatlantic settlements of Spain, Portugal and France, as much as with the plantations of Britain. But, let us inquire, whence do they derive this new pretension? From the law of nature? No. Every independent community has a right indeed, in virtue of its natural liberty, to trade with those who shall be willing to correspond with such intentions; and to molest it in the exercise of this right is an injury. But, though every one has a right to traffick with those who are willing; yet, says Vattel, every sovereign state may decline a commerce which is dangerous, or even disadvantageous; and has consequently full power to determine for itself what is useful, or unsalutary: it may receive therefore, or refuse, any commercial overtures from foreigners, without giving them a pretence to accuse it of injustice, or to demand a reason for such refusal, much less to make use of compulsion or threats. Do the American governments claim the right of free trade from the law of nations? They can not. Colonies are the offspring of society, during that period of refinement, which the prevalence of the commercial spirit supposes. And by the consent of the civilized communities of the European world, it was early established, that the sovereignty as well as the traffick of every plantation should exclusively belong to the state which had formed it. The law of nations therefore, which is only the original consent and continual practice of nations, has prohibited the intercourse of one foreign country with the colonies of all other foreign countries. And a free trade with an American colony of consequence never existed. Thus, while the American governments claim the rights of a free trade with the British plantations, they virtually avow their purpose to disregard the law of nature as well as of nations, which by treaty, or by implication, has regulated universal trade, and with it the conventions of all public bodies.

Our author, from premises which he has clearly established, infers that the assemblies of Virginia and Maryland acted contrary to the genuine interests of their constituents, when one resolved, that no British ship should import the produce of the West Indies, and the other imposed a tax of three shillings sterling the ton of every British vessel. And when the other assemblies concurred generally with both, in the resolution of arming congress with power over commerce, for the purpose of retaliation or redress, they equally sacrificed the real interests of their country to their own resentments. But revenge,



as our author observes, is merely a momentary passion, while avarice is the most obdurate affection of the mind.

Cool calculation, says he, will ere long discover, that were the West India traffic wholly cut off, the planters would certainly lose a market for their provisions and lumber of the annual value of half a million: the commonwealth would moreover be deprived of a yearly balance of £350,000; which is payable in bullion on that branch of business, while specie does not abound among them. By that determination the assemblies would at once raise Canada and Nova Scotia from the ground, and execute that measure, which wise men wish for, as the system that Great Britain ought spontaneously to adopt.

Mr. Chalmers next institutes an enquiry, how far the prosperity of the British West India islands can be affected by the prohibition on the American trade. This subject he considers under three distinct heads: 1st. whence can the British West Indies be supplied with provisions and other necessaries, if the United States should deny their aid; 2. whence can the West Indies be furnished with lumber or timber, wrought and unwrought, for the various uses of cooper and builder; and 3. whence will the West Indies find consumption for their rum and other luxurious productions, if the United States should reject them. In the examination of these interesting propositions, the author has recourse to the custom-house accounts, by the authority of which he is enabled to pronounce, that the British West India islands may continue to enjoy undiminished prosperity, under the so much agitated prohibition of the American commerce.

It affords us pleasure to find that, after the laborious investigation of this intelligent and accurate enquirer, his opinion, maintained with great force of argument, and corroborated by the custom-house entries, coincides entirely with the system recommended by lord Sheffield, and warmly asserted by Mr. Stevenson, in the preceding article. So much positive testimony on one side of the dispute, against vague declamation, or doubtful evidence on the other, must operate powerfully towards producing such a determination on this important subject, as will secure the commercial and political interests of Great Britain, from every insidious attempt to destroy them.

---

*An Essay on Medals.* 8vo. 5s. Doddsley.

SINCE the revival of letters in Europe, several treatises have been published on the study of medals. The subject is not only interesting to curiosity, but, from its nature,

can be elucidated only by those who have had opportunities of cultivating it with attentive observation. On this account, not a few of the writers that have aspired to communicate information, were imperfectly qualified; while others, more intelligent, have loaded their works with such a pedantic show of learning, as rather excites disgust than encourages the application of an enquirer. A concise, perspicuous, and unaffected treatise on medals, is therefore a work which cannot, at present, be unacceptable to the public; and such we find that now before us.

The author begins with an account of the rise and progress of the study of medals, its connexion with the fine arts, and the utility and entertainment resulting from it. He next treats of the metals used in the fabrication of coins and medals; the different sizes of ancient coins; their former value; and the conservation of medals. The metals used in the fabrication of medals are principally three; gold, silver, and the various modifications of copper. Of mixed metals used, the first in point of intrinsic value is *electrum*, being a mixture of equal parts of gold and silver. The coins of the kings of the Cimmerian Bosphorus, during the imperial ages of Rome, are struck in this metal, and are very scarce.

The next in value were Corinthian brass; but our author observes, that notwithstanding what has been advanced by some writers, the ancients used none of this metal in the fabrication of medals, employing it only for vases and other ornamental toys. The fact is, he observes, that those coins, which some antiquaries denominate Corinthian brass, are struck on a mixture of the red and yellow brass.

Many of the Roman coins are of what the French call *potin*, which is described as a mixture of copper, lead, and iron, with a fifth part of silver. Coins of undoubted antiquity have also been found of lead; in particular, among the Greek, those of Tigranes. In Rome, the author observes, they must have been introduced at an early period; for mention of them occurs in Plautus; and a few imperial ones have been discovered.

To give such of our readers as may be unacquainted with the subject, a more distinct idea of the different parts of medals, we shall lay before them a short account, in the order in which they are mentioned by our author.

The side of the coin on which any portrait is delineated, is commonly termed the *face* or *obverse*, and the opposite side is named the *reverse*. The reverses in the ancient Greek and Roman coins are of infinite variety, and afford one of the chief amusements arising from this study. The reverses of the

Roman



Roman coins, our author remarks, have more of art and design than the Greek; but the latter have more exquisite relief and workmanship.

Along with the portrait in front, and various figures in the reverse, most coins have also words marked on one or both sides, explanatory of some circumstance concerning them. The early Greek coins of cities usually contain only the name, or initial letters of the city; but those of the Greek princes have sometimes the monogram of their name. A monogram, with medallists, says the author, is the name of a prince, city, or the like, of which the characters are woven together, so to speak, and the limb of one character perhaps applies to three or four others; so that in the small room of one or two characters, a whole name is comprehended. But in the Roman and Greek imperial medals, there is sometimes a literal information not only around the face, and the reverse, but likewise in the field of the reverse, which in such instances often consists wholly of this intelligence, without any figures. When the letters or words of a medal thus occupy the field, they are called an *inscription*; but when they run round the margin, are on either side of the figures, or upon the exergue, they are denominated a *legend*. The exergue is the bottom of a coin, commonly separated from the field by a line, upon which the figures of the reverse stand. It is so called from being *exempt, out of the work* of the medal.

We shall lay before our readers the author's remarks relative to a few particulars observable in the legends of ancient medals.

' Upon many of the coins struck in the Greek cities we find the legend of the obverse in Latin, while that of the reverse is in Greek. The reason of this, medallic writers have endeavoured to account for in many ways, but appear not to me to have lighted upon the truth, which seems to be, that the magistrate of such country mint, not having any portrait of the emperor, sent to Rome for one, which was returned in a die ready cut with the legend. To this a reverse was made by the Greek artists, the magistrate inclining to save the expence of cutting another obverse. In confirmation of this opinion, I believe, it will be found that few or no coins are found with Latin legends on the reverse, and Greek in front.

Perhaps the most remarkable feature in the legends and inscriptions of Greek imperial medals is the addition, almost perpetual, of the title ΝΕΩΚΟΡΟΣ to the names of certain cities. The word is equivalent to the Latin *edivus*, and will, in spite of my reader's smile, bear the English interpretation of churchwarden. It implies that the cities who adopted that appellation looked upon themselves as guardians of the shrine of some cele-

celebrated deity, whose devoted worshippers they were; and of consequence blest in the immediate and peculiar protection of such heavenly power. At other times it signifies solely the latter circumstance of particular favour; and in this sense we meet with ΝΕΩΚΟΡΩΝ ΤΟΥ ΣΕΒΑΣΤΟΥ, the νεωκορος of the emperor, and the like; though in some instances this may be doubtless applied in the full sense of the word; for temples of different ΣΕΒΑΣΤΟΙ, or emperors, were frequent in the Greek cities, as marks of superlative flattery. Nor let us wonder that the most important Greek cities esteemed themselves honoured in a title which to us appears, at first glance, so trifling; for the celebrated temple, such as that of Diana at Ephesus, and others, were the grand sources of all the wealth and power of those cities who were their guardians. By them strangers were induced to crowd their streets, and lay out their money to enrich the inhabitants. Hence their wealth; and all possible power was derived from the vast influence which these holy cities had over others, in virtue of the sacred deposits committed to their care, and the imaginary, but no less strong, honour of the present deity. Both the authority and the opulence of these cities were increased by solemn and pompous games, celebrated at distant periods, in honour of their guardian divinity. At these games the emperors, sometimes present, and at other times by commission, caused such cities to be solemnly proclaimed ΝΕΩΚΟΡΟΙ, as a singular badge of their favour; and hence in coins and inscriptions we often find Β. ΝΕΩΚΟΡΩΝ, Γ. ΝΕΩΚΟΡΩΝ, ΔΙΣ ΝΕΩΚΟΡΩΝ, ΤΡΙΣ ΝΕΩΚΟΡΩΝ, implying that the inhabitants had been twice or thrice, or oftener, honoured with this solemn distinction.

A circumstance almost as remarkable of the Roman medals, is the inscription VOT. VI. MVLT. X; VOT. XX. MVLTIS. XXX; to be found upon many reverses, and most commonly marked on a shield, or within a crown of laurel. This Du Cange interprets to refer to the artifice of Augustus, who pretended to lay down his power, and resume it for ten years longer as at the request of the senate. This term, says he, was by succeeding emperors shortened to five; and solemn vows were entered into by their subjects for their safety to the end of that period; nay, that double that period might be allotted to their reign, again to be prolonged in the wishes of their people, to a further date. To confute this opinion, we need only refer to the coins of Crispus, and the other Cæsars, upon which this inscription is so common; and from which it is palpable that it can have no reference to their reign, nor to the art of Augustus. However, while the opinion of Du Cange is rejected, it must be confessed that no other interpretation has been offered, and this inscription must, so far as can be seen, be left in obscurity.

Our author afterwards gives an account of the medals called by the Italians *contorniato*, *encircled*, because of the hollow



circle which commonly runs around them. Various have been the opinions of medallic writers respecting these singular pieces of coinage. Some suppose them to have been struck by Gallienus, to the memory of illustrious men, and celebrated *athleta*, at the time when he caused all the consecration-coins of his predecessors to be restored. Others ascribe the invention of them to Greece; because they bear frequently the names and images of illustrious Greeks, as Homer, Pythagoras, Socrates; and of Grecian *athleta*, or actors in the games. Without mentioning other opinions, entitled to like consideration, we shall only subjoin that of the present author, which has received the sanction of some eminent medallists. He informs us, that upon the first sight he had of *conformati* coins, it struck him that they could be nothing else than tickets for different places in the public games; this opinion he thinks is confirmed by the appearance, device, inscription of the reverse, and every circumstance.

It is admitted that the Greek coins, if not the most ancient that exist, are at least of superior antiquity to any, the dates of which can be clearly ascertained. They form the most important part of the medallic science; and to the student who would cultivate a knowledge of this curious department, is very properly recommended the *Notitia Elementaris Numismatum* of Frœlich.

The essayist, after treating of the ancient, proceeds to give an account of modern coins and medals; but it may prove more useful and interesting to our readers, to present them with some account of the arts of distinguishing counterfeit medals from the true. Our author recites, that of all the forgeries of Greek medals which have come to his knowledge, the most gross kind is that of representing persons who could never appear upon coins, such as Priam, Æneas, Plato, Alcibiades, Artemisia, and others. But such counterfeits are too palpable to escape detection. Imposition however has been chiefly practised in Roman medals, and this even in the times of antiquity.

Counterfeit medals are distinguished into six classes; viz. 1. Medals known to be modern imitations of the ancient; but which being by masters, such as the Paduan, &c. are held in esteem. 2. Medals cast from these masterly imitations. 3. Medals cast in molds taken from the antique. 4. Ancient medals which are retouched, and the obverses or reverses altered. 5. Medals which are impressed with new devices, or which are foldered. 6. Counterfeit medals which have clefts, or which are plated. In treating of these different impositions, our author has followed the judicious observations of M. Beauvais,

vais, divested of extraneous matter. We shall content ourselves with extracting the remarks on two of the classes above mentioned.

**CLASS IV.** Ancient Medals retouched and altered. — This is the species of deception which is the most apt to impose even on the skillful; and one must know a good deal of medals not to be the dupe of it. The art exerted in this class is astonishing; and a connoisseur is apt the less to suspect it, as the coins themselves are in fact ancient. The acute minds of the Italian artists exerted themselves in this way, when the other kinds of forgeries became common and known. With graving tools they alter the portraits, the reverses, the inscriptions themselves, in a surprising manner. Of a Claudius, struck at Antioch, they make an Otho: of a Faustina, a Titiana: of a Julia Severi, a Didia Clara: of a Macrinus, a Pescennius: of an Orbiana, an Annia Faustina: of a Mamæa, a Tranquillina: of a Philip, an Emilian. Give them a Marcus Aurelius, he starts up a Pertinax, by thickening the beard a little, and enlarging the nose. In short, wherever there is the least resemblance in persons, reverses, or legends, an artist of this class can, from a trivial medal, generate a most scarce and valuable one.

This fraud is distinguishable by the false varnish which sometimes masks it; but, above all, by the letters of the legend, which are always altered. Though this is sometimes done with an artifice almost miraculous, yet most commonly the characters straggle, are disunited, and not in a line.

Medals of this class are often met with of which the obverse has not been touched, but the reverse made hollow, then filled with mastic of the colour of the coin, which is engraved with such device and legend as the artist knew was uncommon, and would bear a great price.

Others are only retouched in some minute particulars, which however very much diminish the value of the coin.

Against all these arts severe scrutiny must be used by the purchaser upon the medal itself; and the investigation and opinion of eminent antiquaries had upon its being altered; or genuine as it issued from the mint.

**CLASS V.** Medals impressed with new Devices, or soldered. — The first article of this class concerns those medals of which the real reverses have been totally filed off, and new ones impressed by dint of a dye and the hammer. This is done by putting the face or obverse, whichever is not touched, upon different folds of pasteboard, and then applying the dye, and impressing it with strokes of an hammer.

Most of such coins of themselves betray their falsity; the devices and inscriptions being such as are known not to exist upon real medals. Such as the Pons Ælius on the reverse of Hadrian; the Expeditio Judaica of the same emperor; and the like.

‘ Besides



Besides this another infallible token is the difference, more or less, in the fabrication of the face and of the new reverse. This an eye of any skill will always discern at first glance.

Soldered medals are those which consist of two halves belonging to different medals that are sawed through, and then joined with solder. This deceit is common in silver and in brass. They will take an Antoninus, for example, and saw off the reverse, then solder to the obverse a Faustina which they have treated in like manner. This makes a medal which will, from an unknowing purchaser, bring an hundred times the price of the two coins which compose it. When the deceit is used in brass coins, they take care that the two medals be of one hue; though indeed some pretenders in this way sometimes solder copper and brass together, which at once reveals the disguise.

Medals which have a portrait on each side, and which are always valuable, are the most liable to suspicion of this fraud.

To a very nice eye, the minute ring of the solder is always visible; and upon inserting a graver the fabrication falls in halves.

Reverses are likewise often treated in this way, by being soldered to faces not originally connected with them. Pore Jobert tells us of a Domitian, with the amphitheatre, a reverse of Titus, thus gilded to it: and many others of the like kind arise to this day.

It may be worth while to observe here, that many reverses, in coins of the lower empire, are so unconnected with their obverses, that they inspire a mistaken suspicion of this forgery. These occur especially after the days of Gallienus, when numerous usurpers walked over the tragic scene of empire so fast that it was difficult to catch their features. The coiners had scarcely time to engrave a portrait of the emperor, much less to make his medal an appropriated monument of adulation. Hence PACATOR ORBIS on a reverse of Marius, who reigned only three days: and innumerable others, which are owing to the coiners stamping the medals of these fugitive sovereigns with reverses which they had ready fabricated for some preceding monarch whose reign was at least of sufficient duration to afford time for engraving a reverse.

The twenty-fourth and last section of the volume contains the present prices of medals; and in an appendix we meet with an explanation of the more common abbreviations occurring on Roman medals, exclusive of some other articles.

The work affords a comprehensive, systematic account of medals; and will be read with pleasure by those who have a taste for that entertaining part of historical knowledge.

*Philosophic Essays on the Manners of various foreign Animals ; with Observations on the Laws and Customs of several eastern Nations. Written in French by M. Foucher D'Obsonville, and translated into English by Thomas Holcroft. 8vo. 5s. Johnson.*

OUR author seems to have been both an attentive and an intelligent observer ; so that, though these Essays are often light and desultory ; though his knowledge of the principles of philosophy, or the systems of natural history, is by no means either correct or extensive, yet we find both instruction and entertainment from the facts which he has collected. In a military capacity, he has frequently traversed the peninsula of India, the deserts of Arabia, and other parts of that continent ; his philosophical observations are therefore frequently mixed with political ones, and descriptions of the customs of the inhabitants. It is impossible, nor indeed would it be candid, to try our author's merit by statutes with which he was unacquainted ; and on this account we shall not enter on many disputed physiological discussions, which these Essays occasionally suggest. The facts were generally observed by himself, or reported on good authority ; but there are some of the latter class which we wish had been confirmed by his own observation, as he seems to possess both candour and fidelity.

We should have selected his investigation of the national character of the Arab, and the influence of custom and political changes on it. But the account is by no means exact or discriminated, and would rather exceed our limits : the following is, in that respect, less exceptionable and more interesting.

'The English possessions in India are, out of measure, beyond their national strength. It is not necessary to examine, if in confining their conquests to certain limits, the government would have acted more rationally, would have had fewer expences, and greater gains ; the ambitious and the designing must exercise their talents on vast surfaces. To acquire and preserve their possessions, they have been obliged to maintain and discipline large bodies of seapoys ; and hence their success.

'The colour, manners, language, and religion of these men, are different ; and as their masters have not taken any of those precautions which an intelligent foresight would indicate, it may be said, that by opening a new road to abuse and depredation, they have engendered in their bosoms those seeds of destruction which, sooner or later, must come to maturity. They have already had some lessons on this head ; that given



by Kansaeb was severe. It was to this Indian, who, from a common seapoy, became commandant of Madura, that I made the voyage during the last war, of which I have spoken in a preceding article. He made himself independent, and, after opposing the whole force of the English in the Carnatic, till they began to despair of success, fell at last by the cowardly hand of perfidy.

There are other circumstances which will contribute to spread the principles of tactics, and the military resources of Europe among the Indians: ten or twelve thousand French deserters, scattered through Indostan, will help to produce this effect. Hence a plan was proposed in France to shake the power of the English: it was imagined, that all the princes of the peninsula might be stirred against the common enemy, and the means of recruiting their small parties have been voluntarily, though indirectly, given them: their chiefs have been encouraged by brevets, military distinctions, and even by rank as superior officers.

I confess this project, approved of by persons whose abilities I respect, and at first also by many of my best friends, has always appeared to me not only illusory, but dangerous to all future military power of the French in these countries. I may be deceived, but this consideration has induced me to insert, in this place, a few circumstances I have formerly had occasion to write on this subject.

The presence of the French deserters in India is certainly disagreeable to the English; but the question is, whether the hope of a general confederacy among princes of a new date, each solely occupied in establishing individual power, be well founded? or, supposing it so to be, would it originate in the political influence and combination of a hundred French commanders, each living at three, four, and five hundred leagues distance from the other? The Indians, who, by rewards, have drawn them to their service, have not done it to receive their commands, but to profit by their talents, in order to subjugate their neighbours. But facts are more convincing than dissertations.

Every one, who has the least knowledge of Indian affairs, knows that the late Salabetzingu, viceroy of Dekan, has almost always had a corps of French troops about his person, sent him by the government of Pondicherry: yet M. Bussy, who commanded those troops, could never bring him or his counsel to a determination to lead his forces into Bengal or the Carnatic, either directly, or as auxiliaries to the French against the English.

Pondicherry, when attacked at the beginning of the present war, would have been saved by the least movement of Hyder Ali, and he suffered it to fall; yet, during the last years of his reign, he received great assistance from about four hundred French, lent him by government, and devoted to, and serving

serving him under the command of their own officers; and it was undoubtedly his interest to have saved the place. At present he opposes the English with all his power; but it is their own wild ambition that has armed him; he is valiant and enterprising; he is provoked, and he had tried his strength against them. In 1768, although abandoned by a small corps of European deserters, who were bought off, he obliged them to defray part of the expences of an unjust attack, and cede to him the district of Karour.

Mons. d'Obsonville apologizes for the conduct of the wandering Arab, and gives a consistent and, we believe, a just description of this peculiar nation. Often vanquished, but never subdued, they look on their native deserts as their own possessions; and it would be difficult for European sophistry to prove the contrary. If it be so, with little additional reasoning they might evince a right to some tribute from those, whose avocations lead them to travel through their territories; and, when their moderate requests are complied with, they become generous and useful friends. In all this account there is nothing absurd, unjust, or oppressive; and we think it is confirmed by Mr. Irwin, and all the other travellers who have occasionally met them. Those who have suffered from a contest, have sometimes been the unfortunate victims of others' depredations, or of their own imprudent violence. We think it would be highly advantageous to adopt our author's opinions, and endeavour to bribe those whose demands are moderate, and with whom it is impossible to contend.

The syphons or whirlwinds called Samiel, are also the objects of our author's attention. He tells us that horses, when they perceive their approach, if they cannot avoid them, turn their faces with the wind and fix their nostrils in the earth: by this precaution they are rendered harmless.

'Some enlightened travellers have seriously written, that every individual who falls a victim to this infection, is immediately reduced to ashes, though apparently only asleep; and that when taken hold of, to be awoke by passengers, the limbs part from the body, and remain in the hand. Such travellers would evidently not have taken these tales on hearsay, if they had paid a proper attention to other facts, which they likewise either did or ought to have heard. Daily experience proves, that animals, by turning themselves and pressing their nostrils to the earth, as has been said, and men, by covering their heads in their mantles, have nothing to fear from these meteors. This demonstrates the impossibility that a poison, which can only penetrate the most delicate parts of the brain or lungs, should calcine the skin, flesh, nerves, and bones. I acknowledge these accounts are had from the Arabs themselves;

but



but their picturesque and extravagant expressions are a kind of imaginary coin, to know the true value of which requires some practice.

I have twice had an opportunity of considering the effect of these siphons with some attention. I shall relate simply what I have seen in the case of a merchant and two travellers, who were struck during their sleep, and died on the spot. I ran to see if it were possible to afford them any succour, but they were already dead, the victims of an interior suffocating fire. There were apparent signs of the dissolution of their fluids; a kind of serous matter issued from the nostrils, mouth, and ears, and in something more than an hour the whole body was in the same state. However, as according to their custom, they were diligent to pay them the last duties of humanity, I cannot affirm that the putrefaction was more or less rapid than usual in that country. As to the meteor itself, it may be examined with impunity, at the distance of three or four fathoms; and the country people only are afraid of being surprized by it when they sleep: neither are such accidents very common, for these siphons are only seen during two or three months of the year; and, as their approach is felt, the camp-guards, and the people awake, are always very careful to rouse those who sleep, who also have a general habit of covering their faces with their mantles.

The siphons have a double motion, one a strong rotation within themselves, the other a progressive movement, more or less accelerated, according to the force of the upper winds by which they are carried, for their head is in the clouds; and thence they may be seen to receive both their impulse and first existence. I have observed, by the motion of the clouds, that when two violent currents of wind meet, are sustained, and agitate the atmosphere to a considerable height, we have scarcely on earth felt a breath of air. Thus these currents meeting, and acting in a contrary direction, form a whirlwind, which takes a medium course; that is to say, if the currents happen, one to come from the north and the other from the south, the siphon will be carried either east or west; I mean nearly, for its progressive motion is often irregular and disturbed, and not in a direct line; and this seems to be the result of the ascendancy, which, by a sudden gust, one wind may obtain over another.

These dangerous air columns only occasionally inclose mortality in their bosoms; those that I have seen appeared to come from the chain of mountains, which is continued through Diarbekir, Curdistan, and the adjacent countries. It is probable, that they detach, collect, and carry off bituminous, sulphureous, vitriolic, and arsenical vapours. I cannot, from experiments, assert this, but I know that these substances are found in various cantons among those mountains; and that they constitute a branch of commerce; that likewise there are

various rivulets of a limpid water, that rise in the same places, which are styptic, acrimonious, and intolerably bitter.

Two other remarks concur to throw farther light on this matter, and indicate the qualities of the vapours with which these siphons are charged. It is observed, that those which are formed and directed in their course, by winds blowing from opposite points in traversing the deserts, carry off saline and sulphureous particles, which are dangerous only to the sight; and if they have occasionally been mortal to persons of delicate constitutions, it was only by suffocation.

Again, the natives have found that when most dangerous siphons have, for any length of time, followed the track of a river or a lake, and especially if they have been carried out to sea, they are presently deprived of their poisonous qualities, which are attracted and absorbed by the water. At certain seasons of the year, siphons are often seen upon the gulph of Persia; the proximity of the shores permit the natives to observe, that those formed upon the gulph itself, by the opposite currents of air that come from the mountains of Persia and Arabia, are filled with water only; but that, on the contrary, those which still remain near land inclose, in part, dust and small leaves, which indicate their origin to have been on the earth. But since these, as they proceed farther to sea, acquire a greater quantity of watery particles, I have no doubt, but in following the course of the gulph, they become totally aqueous.

The manners of different animals, though apparently the chief object of the work, are, in our opinion, of less importance than the observations which we have transcribed; we have therefore preferred them for our extract. On that subject many common circumstances are repeated; but, as they are the result of experience, tend to confirm our former accounts. Many things are new and curious, and all are related with ease, freedom, and vivacity. We suspect that too much intelligence and reflection is still bestowed on the "half reasoning" elephant; but, in our author's language, "as we cannot oppose his observations by any of our own, we can only mention our suspicions." The Ourang Outang, which M. D'Obsonville is willing to raise to human dignity, is, from his own accounts, of the monkey race.

*'Simia quam similis turpissima bestia nobis!'*

The translation of this entertaining performance is certainly accurate, as it is said to have been reviewed by the author; but we ought also to add, that it is easy, clear, and sufficiently elegant. The author hints at a future publication of observations; and this specimen leads us to expect considerable satisfaction from them.



*Italian Letters; or, the History of the Count de St. Julian. Two Volumes. Small 8vo. 5s. sewed. Robinson.*

**T**HIS is a novel which interests rather by a faithful and accurate description of the feelings of a wounded mind than by incident, bustle, or intrigue. They are called, with propriety, Italian Letters, independent of the scene and country of the persons introduced. The sentiments are refined and delicate; the distress rises to horror, and inspires fury and revenge. The language is suitable to the situations; it is spirited and forcible in some parts, and more placidly elegant in others; but it is deformed by foreign idioms, and words which with particular meanings are scarcely yet naturalized. To commit a character, or to 'manage it,' for instance, are not, at present, allowable. — We shall add a little sketch of the story.

The hero of these Letters, the count de St. Julian, the friend and the Mentor of the marquis de Pescara, is, from his disposition and acquisitions, well fitted to discharge this important office: a man of honour, steadiness, and sanctity, whose head and heart are equally adorned with every science, and every quality, which can render him respectable and amiable. The marquis admires the form of virtue in his friend; but has not steadiness to imitate him. In this character, the author seems chiefly to have failed. The indiscretions of the marquis, in the former part, are those of weakness; in the latter, they are the most detestable villany. We allow much for the difference of his company, and the solicitations of his fashionable friends; but the change is too sudden to be natural.

The count, after the departure of the marquis from the university, in which they were educated together, loses his father, and is deprived of his patrimony by the villany of his brother. He departs from Palermo; and, when attacked by robbers, is rescued by the marquis, who had heard of his misfortunes, and was hastening to relieve them. With him he remains some time, and is then affectionately received by his relation, the duke of Benevento, with whose daughter, Matilda, he had been long, and as he thought, hopelessly in love. The duke however overlooks the poverty of a relation so valuable, and gives his consent to their union. Soon afterwards, before the marriage is completed, he dies. Matilda insists on delaying it for a decent period: and, in this interval, the marquis requests that he would attend to his affairs in Spain; for his estate in that kingdom was in danger, in consequence of a new claimant, who was eagerly prosecuting his

cause. The count, eager to evince his friendship and his gratitude, consents to the request; and, while he successfully conducts the affairs of his friend, the marquis poisons the mind of Matilda, with a forged tale of the count's infidelity and marriage in Spain, and obtains her hand at the altar. When this event is known, the count hastens his return, meets the marquis, and kills him in a duel. Matilda is inconsolable: she cannot wed the murderer of her husband; but preserves a lively friendship for the count, with a constant regret of her own credulity.

These are the outlines of this interesting little work, which in general deserves our applause. It is pleasing, tender, and pathetic; at the same time strictly moral, and cautiously delicate. If we have insinuated some little errors, they were chiefly mentioned to point out where the author may most advantageously employ his correcting pen.

We shall select a passage from the letter of St. Julian to Matilda, after the duel, when he was unacquainted with the arts which had been used to alienate her mind. It speaks daggers more feelingly than if he had used them.

‘I write this letter with a hand dyed with the blood of your husband. Let not the idea startle you. Matilda is advanced too far to be frightened with bugbears. What, shall a mind inured to fickleness and levity, a mind that deserted, without reason and without remorse, the most constant of lovers, and that recked not the consequences, shall such a mind be terrified at the sight of the purple blood, or be moved from its horrid tranquillity by all the tragedies that an universe can furnish?’

‘Matilda, I have slain your husband, and I glory in the deed. I will answer it in the face of day. I will defy that man to come forward, and when he views the goary, lifeless corse, say to me with a tone of firmness and conviction, “thou hast done wrong.”’

‘And now I have but one business more with life. It is to arraign the fair and traitorous author of all my misfortunes. Start not at the black catalogue. Flinch not from the detail of infernal mischief. The mind that knows how to perpetrate an action, should know how to hear the story of it repeated, and to answer it in all its circumstances.’

‘Matilda, I loved you. Alas, this is to say little! All my thoughts had you for their centre. I was your slave. With you I could encounter tenfold calamity, and call it happiness. Banished from you, the world was a colourless and confused chaos. One moment of displeasure, one interval of ambiguous

silence



silence crowded my imagination with every frantic apprehension. One smile, one word of soft and soothing composition, fell upon my soul like odoriferous balm, was a dulcet and harmonious sound, that soothed my anguish into peace, that turned the tempest within me to that still and lifeless calm, where not a breath disturbs the vast serenity.

And this is the passion you have violated. You have trampled upon a lover, who would have sacrificed his life to save that tender and enchanting frame from the impression of a thorn. And yet, Matilda, if it had been only a common levity, I would have pardoned it. If you had given your hand to the first chance comer, I would have drenched the cup of woe in solitude and darkness. Not one complaint from me should have reached your ear. If you could have found tranquility and contentment, I would not have been the avenging angel to blast your prospects.

But there are provocations that the human heart cannot withstand. I did not come from the hand of nature callous and intrepid, I was the stoic of philosophy and reason. To lose my mistress and my friend at once. To lose them!—Oh, ten thousand deaths would have been mercy to the loss! Had they been tossed by tempests, had they been torn from my eyes by whirlwinds, I would have viewed the scene with eye-balls of stiffened horn. But to find all that upon which I had placed my confidence, upon which I rested my weary heart, foul and false at once: to have those bosoms, in which I fondly thought I reigned adored, combined in one damned plot to overwhelm and ruin me—Indeed, Matilda, it was too much.

---

*Physical and Chemical Essays. By Sir Torbern Bergman. Vol. I.  
(Concluded, from p. 187.)*

THE saccharine acid is a substance little known to the English chemists; indeed so little, that, though highly useful as a re-agent, in the analysis of mineral waters, it has scarcely been employed by the physicians of this nation. It is procured in a crystalline form, by pouring nitrous acid on fine sugar, and distilling the liquor: the crystals separate when cold. It was at first supposed that it was only a modification, (a convenient term) of the nitrous acid. If we for a moment allow this, it will still, from its different affinities, be a convenient substance; and, as our author justly observes, if we had continued, with the elder chemists, to consider the nitrous and muriatic acids as subordinate and derivative, we should have been to this day ignorant of many singular facts, which were

were by degrees discovered, principally because many considered these acids as distinct and separate substances. M. Bergman confesses that he could never obtain the saccharine acid without the assistance of the nitrous; Mr. Schrikel, we are told, has since procured it, by repeated distillations and condensations alone. We were rather surprised at this difficulty, because we recollected some passages in old authors, which shewed that they were not unacquainted with this acid, and that they obtained it by simple distillation. Ray tells us, in his *Historia Plantarum*, *saccharum saleum acidum, & maxime corrosivum continere ex distillatione patet*, vol. ii. p. 1280. Dr. Willis confirms this testimony. *Enim vero concretum istud, sale satis acri et corrosivo, cum sulphure tamen delinito, constat, prout ex analysi ejus Spagnice facta, liquido patet. Quippe saccharum par se distillatum, exhibet liquorem aqua stygia vix inferiorem.* (De Scorbuto, p. 205.) It is mentioned by Schroeder (Messis Medico-Spag. 528.) by Hoffman, (vol. v. p. 717.); and by Lemery, (Cours. Chem. 522.) In all these cases, it was distilled by itself, or mixed with sand to prevent ebullition. Sometimes it was dissolved in water, and the solution was absorbed by bricks, and afterwards distilled from them. It is probable that, in all these instances, the true saccharine acid was really produced, from a fact mentioned by Schroeder, that it dissolved crystals. This was a vague term among the ancient chemists; but the acid of sugar certainly dissolves some bodies of this kind, not easily affected by any other. There is another fact, not so easily reconciled to modern discoveries: it was a secret remedy for the calculus; and our author tells us that the peculiar acid of the calculus is of this kind. But this subject will lead to longer discussions than we have room for; we shall certainly resume it, and be able probably to illustrate it by some recent discoveries in France.

We must next enquire into the origin of this acid. It is generally supposed, that the acetous acid is virtually contained in sugar, and evolved rather than produced by the process of fermentation. The action of fire may be inspected to affect that by violence, which is usually the result of a more tedious operation; and it would then remain a subject of enquiry, how far the difference depended on a more or less complete separation of phlogiston. But we find the abbé Fontana has obtained an acid, perfectly like that of sugar, from gums and resins, which are not susceptible of the acetous fermentation. Mr. Wat has procured it from galls; so that every enquiry into its nature must be deduced from a more distant source. It may be concluded, from analogy, that an acid really exists in sugar,



sugar, involved and covered by a mucilage; and we shall transcribe the subsequent changes from our author.

If we examine the operation with all due attention, we shall find that nitrous acid has suffered no other change than the following: it grows red, being loaded with phlogiston; it becomes more volatile and more weak, and a part of it assumes the nature and properties of that elastic fluid, now distinguished by the name of nitrous air: again, nothing more is required than that the essential acid entangled in the oily part be set at liberty, and this is obtained in an highly active state, although still loaded with so great a quantity of phlogiston as to exhibit crystals, while other acids, being deprived of that principle, are always fluid; and this solid state is competent to saccharine acid, even when further deprived of phlogiston.

After this change, the acid of sugar differs in almost every respect from the nitrous, particularly in dislodging the latter from almost every body with which it has been previously combined.

If any will attribute all the difference to phlogiston, I will not deny, that that subtle principle forms a wonderful source of difference; but the differences which take place here can by no means be attributed to this when properly examined. The nitrous acid is weakened, and made far more volatile, by union with the phlogiston; the acid of sugar much more fixed, even when loaded with so great a quantity as to be crystallizable;—it almost every where expels the strongest nitrous acid, as experiments shew; besides, the phlogisticated nitrous acid produces, with the very same matters, compounds totally different from those with acid of sugar. Nothing can be judged from circumstance which are unknown, forged, or at best possible—and among all the facts yet known concerning the acid of sugar, we can find no signs of its being derived from the nitrous acid.

The ninth dissertation relates to the preparation of alum, whose use is considerable and extensive. M. Bergman mentions the purposes to which it is applied, and gives a short history of its preparation. The proximate principles of pure alum are the argillaceous earth, and very probably a superabundant vitriolic acid. On this latter circumstance, there are some disputes; but they probably arise from this source. In the union of acids with alkalis, we perceive a point of saturation, which does not take place with earths or metals. If a small portion of acid is added to a large one of alkali, it neutralises a proportional part of the alkali, and the remainder preserves its peculiar qualities. Very generally earths and metals, in similar circumstances, divide the portion of acid between every part, and the whole is changed in a cer-

tain degree. In the present case, a part of the acid is greedily absorbed by the earth, and forms what has been styled embryon alum: to produce the salt, in a soluble and crystalline form, an additional quantity of acid is necessary, which adheres very loosely. It is this loose acid which is called superabundant, and it really deserves the title. We have used the term argillaceous earth, in preference to clay, since it is really only the argil which unites with the acid. Clay sometimes contains seventy parts in one hundred of flint; and, even in that state, preserves its properties and name. We cannot even abridge our author's particular account of the preparation of this salt; but in many respects it is highly useful. We have transcribed the following paragraph, because the importance of Roman alum is so great, in some manufactures, as well as in dying, that it is frequently sophisticated. This deceit is best prevented by increasing the quantity of this valuable sort, and consequently lowering its price.

The Roman alum has been considered as the best sort: at Brunswick, some time since, they began to manufacture a species of alum, which, if we give credit to report, may properly be substituted for the Roman. I have examined this alum chemically, and found it mixed with cobalt. I have no doubt but the ore of cobalt roasted, is mixed with the lixivium; for in that case the disengaged acid attacks the metallic calx, and forms a rose-coloured solution, which gives a tinge to the crystals. This alum, dissolved in water, yields, upon adding a fixed alkali, an urinous salt; with phlogisticated alkali, discovers iron, but not cobalt; which last is manifested by the violet colour, on fusing the precipitated base with borax:—it is distinguished from the Roman alum by its crystals, which are all tinged, acerb, and less acid than the Roman. A crystal of Roman alum, exposed to heat by the blow-pipe, soon grows opaque, swells, and foams, but a spongy, immoveable, white mass soon appears; whereas the Brunswick swells less, hardly foams, but melts, and at last grows green; besides, from the very beginning, it sends forth copiously an arsenical smoke.

The next dissertation is highly valuable, viz. on the preparation of antimoniated tartar, or, as it is commonly called, emetic tartar. The great object of the physician and chemist is to obtain a salt, uniform in its operation; but the emetic tartar is sometimes uncertain, from its mode of preparation, and sometimes from the state of the stomach. The former defect only belongs to the chemists; the latter is rather the province of physicians: perhaps the uncertainty, from the state of the stomach, may be always lessened, by exhibiting it in an acidulated draught.

Our author considers the subject only in a chemical view, and



and gives the result of the preparations, recommended by the different colleges. From the date of this dissertation, he could not have known the two methods ordered by the college of Edinburgh, in the year 1774, or in their last edition. On an accurate examination of those in his hands, the weaker of the preparations contains scarcely 0.05, while the stronger have upwards of 0.24, of the metal. On the choice of the base, our author examined those which have been usually employed, viz. the hepar, the crocus metallorum, and the glass: all these are, he thinks, very uncertain in their preparation, and consequently will render the future medicine very unequal in its effects. The regulus itself is uncertain, since it always undergoes some preparation; and he is by no means convinced that it possesses, when pure, any emetic powers. On the whole, our author prefers the powder of algaroth, a preparation well known to the chemists; which is pretty certain, as it is the result of mixing corrosive sublimate, whose activity is nearly uniform, and crude antimony. Chemists will easily understand the compound which is called butter of antimony, from which the marine acid is separated by washing only. In our fifty-sixth volume, page 332, we selected, from the last edition of the Edinburgh Dispensatory, a preparation of this kind, in which the marine acid is separated more completely, by the addition of alkali. Our author objects to this method, as in the use of the alkali there is room for fraud, and we should not, he thinks, without urgent necessity, confide in the fidelity of the operator.

The menstruum, which has very generally been cream, or crystals of tartar, is next examined. This salt is hitherto very little known, though so constantly employed. It is certain only, that it contains an acid and a neutral salt, viz. tartarized tartar; to which we may add, from our own experiments, an argillaceous earth and an oily matter. He finds that the pure acid has no effect on the metal till it is dephlogisticated; and that, in this state also, it is soluble in the neutral salt. We shall transcribe our author's description of the method of preparing each.

Antimoniated tartar:—let five ounces of cream of tartar, reduced to powder, and two drachms and a half of powder of algaroth, precipitated by warm water, washed, and dried, be gently boiled in a glass vessel for half an hour, in half a kanne of water; this being done, there generally remains a small quantity of a blackish mercurial powder. I do not saturate the tartar completely, as, in that case, some of the solution turns to a gelatinous matter, and the salt resulting, being long suspended in the water, is more easily decomposed, which occasions

sions considerable inconvenience in practice: besides, the weight of a weaker medicine being greater, its quantity may be ascertained with more accuracy; and it may be taken at different times, without any danger: let the filtered solution be evaporated in an open vessel (not metallic) till a pellicle appears; let it then be kept in a digesting heat till crystals form, which must be taken away by degrees, and dried on moistened bibulous paper:—all the clear crystals are equal in weight to the tartar employed: the more purely saline crusts adhering to the sides of the vessel, amounting to about half an ounce, are to be well washed off with cold water, and kept by themselves—the last red and thick lixivium must be thrown away.

The former preparation is least soluble. Half an ounce of distilled water takes up about three grains of the former, and five of the latter.

The last essay is on magnesia; a substance now pretty well understood. Our author differs only from the English chemists in recommending a larger proportion of water, and if we recollect rightly, somewhat more of the alkali. The different combinations of magnesia are next examined; and he remarks, with strict accuracy, that this earth can never be rendered perfectly pure, except it be precipitated by volatile alkali. Calcination may indeed deprive it of air, but not of the lime or siliceous earths, communicated by the alkali generally employed. Volatile alkali however does not entirely deprive it of air. We should have been glad to have transcribed our author's account of the solution of magnesia, in water previously impregnated with fixed air, as we think it might afford a very useful medicine; for the magnesia would be attracted by the acid commonly found in weak stomachs, and at the same time set free the air, which will afford a necessary stimulus. M. Bergman next describes the vitriolated, the nitrated, the salited, fluorated, arsenicated, boraxated, saccharated, tartarated, acetated, formicated, and phosphorated magnesia. These several preparations are useful, as they afford some chemical facts of importance, but do not admit of any extensive application. Magnesia does not attack alkalis, though Margraaf seemed to suspect, that too great a quantity of alkali might lessen the quantity of the precipitation. It slightly unites with sulphur. Its affinity to different substances, according to our author, are expressed by the following order: fluor acid, saccharine, phosphoric, vitriolic, arsenical, nitrous, and marine; the acid of tartar, ants, vinegar, and borax; phlogificated vitriolic, and phlogificated nitrous acid; fixed air, water, and sulphur.

The next attempt is to prove, what will not in the present state of science be doubted, that magnesia is a real earth, essentially



essentially different from every other. Its natural history is yet uncertain. This earth frequently occurs in other bodies, and in a saline form; but it never forms large masses, or composes the bulk of immense mountains. It is a solitary and transient production, whose utility is established, in quantities proportioned to the scanty supply which nature has afforded. With this subject the author concludes the first volume. Its value it would be now useless to point out, since it has been already established by the concurring applause of the scientific world.

*The Looking-Glass, containing select Fables of La Fontaine, imitated in English; with additional Thoughts.* 8vo. 3s. sewed.  
Walter.

EVERY one, who has made only an inconsiderable progress in French literature, is acquainted with Fontaine. His easy lively narrations, the sudden turns, acute reflections, and fly strokes, have recommended him to readers of every kind. As this is the first very successful attempt to translate his Fables, we shall examine it with some care. We must not, at this period, dwell on the life of the author; his honesty; his simplicity, approaching almost to fatuity; or his rich, copious, and expressive vein: our present object is the translation; for the rest is well known.

In this English dress the reader will meet with some new thoughts, I dare not say such as Fontaine would have given us, had he been an Englishman. I intended to have imitated most of his fables, upon a supposition it would have been an undertaking similar to none in our language; for though our excellent Gay is an author whose works will never die, Fontaine was not his prototype. A further progress in my scheme would have produced a work of magnitude, which probably would never have been read. I therefore present the public with but a specimen; if, contrary to my expectations, it should be approved of, I shall with pleasure proceed, and produce a second cargo; particularly designing to imitate the fables I shall select, in as great a variety of metre as circumstances will admit of: considering my puerile publication as a trifling substitute for a ride in a wet morning, my Muse, therefore, by varying her paces as much as possible, may probably meet with a more general approbation.

In this attempt, we think that our author has succeeded very well: his faults are few, his verses easy, generally correct, and always animated. It may probably be owing to a provincial dialect, but is certainly an error to pronounce *window*, *fellow*, and *Goliab*, as if spelt *winder*, *feller*, and *Golier*; yet these words frequently occur at the end of lines, and rhyme to *binder*, *tell her*, *nigher*, and some similar ones. Again, our language should not be so tortured on the poetical rack, as to change

change the place of the accent; we therefore object to 'executed, interviews,' and similar irregularities. The English is perhaps better fitted to the stately heroic than to the more rapid measure; though lately the latter has been employed with success. Our author's dactyls are often heavy, and moveable only by force; they are also sometimes clogged by injudicious elisions; the second line of the following stanza is an instance of this kind.

'For old father Time, with his sorrowful face,  
Is telling Hymen his torch cannot burn;  
That the mind can pass moments of pleasure re-trace,  
But, alas! they can never return.'

In consequence of his plan, he has often expanded the fables of the original author; and the additions are frequently well adapted to the whole. But in some instances, as in the fable of the 'Young Widow,' the beauty consists in the terseness, and a sudden unexpected turn. By explaining, at a greater length, the change of dress, the returning relish for courtship and amusements, we anticipate the question to her father, and it loses its effect.

'Où donc est le jeune Mari  
Que vous m'avez promis, dit-elle.'

In the fable of the 'Grasshopper and the Ants' too, we lose the force of the conclusion. When the former applied for charity, he was asked what he did during the summer;—'I sang night and day.'

'Vous chantez? J'en suis fort aise;  
Hé bien, dansez maintenant.'

In the fable of 'Death and the dying Man,' the translator has scarcely preserved the sentiments.—It was better executed some time since, under the title of the 'Three Warnings.'

We will candidly own that we have been studious in collecting blemishes, because we thought that the author was worth our care; and if he is displeased at this uncommon nicety, we can only allege, that it seemed the best return for the pleasure we received from his translation. Every acquaintance will praise; the real friend alone will occasionally blame.

If we were to transcribe passages, in which the meaning and manner of the author are represented with peculiar felicity, our criticism would be much too long; so that we must refer to the work.

He professes to translate as Fontaine might have written, if he had been an Englishman; and consequently, in the 'Rat retired from the World,' inserts some just and animated censures on monkish luxury, idleness, and hypocrisy; but why did he omit the following fly stroke of his author?

*Dieu prodigue ses biens*

*A ceux qui sont vœux d'être sages,*

Another



221

*Hunter's Sacred Biography. Vol. II.*

Another beauty of the fabulist, observed by Sherlock, is well preserved by his translator, viz. to make a grand idea arise out of a seemingly frivolous situation. — The Ant's life is saved by a Pigeon.

' Away she flew — but return'd with a branch in her bill,

(Again an emblem of life's restoration)

Which was instantly plac'd with such exquisite skill,

That it serv'd as a bridge of salvation;

Whilst heaven-born Pity stood near as a guide,

(If lost lest the state should bewail her)

'Twas a Cape of Good Hope, which with joy the desert'd,

Like *Inglefield's extatic sailer*.

Again, in the 'Animals dying of the Plague,' which is extended with much art and success, we meet with the following unexpected allusion:

' Poor honest Dapple! when she'd made

This innocent confession;

The wicked wolf became upbraid

The triplicate transgression.

Attorney-general to the gang,

He partially declaims;

And with an infamous harangue,

The multitude inflames.'

The English Fox was too obvious to escape: the fable is well known.

By necessity thus reconcil'd and prepar'd,

'Twas in conscience a wise Coalition;

Tho' arrang'd amongst those who, he'd often declar'd,

Were with equity doom'd to perdition.'

We shall now leave this pleasing little volume, with our approbation of the attempt, and recommendation to pursue it. If our judgment has any weight, the translator will not fail of his reward.

*Sacred Biography: or, the History of the Patriarchs from Isaac to the Birth of Moses inclusively: Being a Course of Lectures delivered at the Scots Church, London Wall, by Henry Hunter, D. D. Vol. II. 8vo. 6s. Murray.*

IN these Lectures the author has very happily contrived a method of exciting the attention of his auditors, by intermixing entertaining anecdotes of ancient history with moral observations. Here the reader will find, that the lives of the patriarchs suggest many beautiful reflections and useful instructions, which are not observed by those who content themselves with a slight and cursory perusal of the sacred volume.

This

This writer possesses a lively fancy, and a quickness of apprehension, which seizes every circumstance that affords any practical improvement, or important information. On some occasions however he seems to have given too great a scope to his imagination. Thus he tells us, that Jacob pursued his journey to Padan-aram, 'without so much as a favourite, faithful dog to accompany and cheer his wanderings.' In this passage the author had probably Tobit in his thoughts. The observation relative to the dog, in the apocryphical history of that pious Jew, corresponds with many other parts of that silly book; but such a remark would have been below the dignity of the Mosaic history, and is scarcely worthy of the pulpit.

The doctor censures those writers very justly, who pretend to find typical resemblances between almost every incident in the lives of the patriarchs, and in that of the Messiah. Yet, notwithstanding this, he pursues the typical scheme too far, and does not make a proper distinction between casual resemblances, and real prefigurations of future events. The sacred writers frequently argue with the Jews from a similitude of circumstances in the Mosaic and the Christian dispensations. But similitudes are not types in the common acceptance of that word; and those writers who find a type in every part of the Mosaic history, only indulge themselves in visionary conjectures, and injure the cause of Christianity.

The author, in treating of Jacob's rods, Gen. xxx. 31, tells us, 'that the female, in the moment of conception, is more than usually susceptible of strong and extraordinary impressions, and capable of transmitting that impression to her young, so as clearly to mark and distinguish it.'

Though the doctor asserts, that 'this is a fact too fully proved by experience to be denied,' we are firmly persuaded that it is a vulgar error. As far as natural means were concerned in the case of Jacob, it is most probable that the speckled rods were only intended to reconcile or familiarize the ewes to the speckled rams.—We can have no idea of imagination thus operating in brutes.

Some late preachers, in addressing themselves to the female part of their congregation, have adopted the language of wheedling, flinical petits matres. The following sentence has a tincture of this affectation.

'With what admirable propriety and skill do the Holy Scriptures represent the most distinguished, exalted, and amiable female characters, engaged in virtuous, humble, useful, employments! Sarah baking cakes upon the hearth for the entertainment of her husband's guests; Rebekah drawing water for



the daily use of her brother's family, and the refreshment of the weary traveller; and Rachel feeding her father's sheep. O that ye knew, my sweet friends, wherein your true dignity, value, and importance consisted! In being, what God from the beginning intended you to be, "an help meet for man;" not the mere instrument of his pleasure, nor the silly idol of his adoration.

These are excellent examples; but proper allowances must be made for the difference of ancient and modern times; manners, customs, stations, &c. In this polite metropolis the preacher will never persuade the fairer and sweeter part of his audience, to imitate Sarah in baking cakes, Rebekah in drawing water, or Rachel in feeding sheep.

This volume contains eighteen discourses on the history of Isaac, Jacob, Joseph, and Moses.

*A Treatise on the Monsoons in East India.* By Capt. Tho. Forrest.

12mo. 2s. Robson.

**T**HIS little tract appears to be the work of a person of sound judgment, and much practical experience. His remarks are in general extremely judicious, and have afforded us both pleasure and information. They are not always expressed in the most elegant manner; but when a writer acquaints us with useful truths, which he has obtained from attentive enquiry and examination, little imperfections of this kind may be easily dispensed with. The general theory of the trade-winds has been long well understood; but the exceptions to this theory, which arise from partial causes, or local circumstances, have been but little attended to. D'Anville's *Neptune Oriental*, and the *India Pilot*, are almost the only works of credit upon this subject.

Captain Forrest professes to have been employed twenty years in the India trade; and having made fifteen voyages from Indostan to the eastward, he must have had sufficient opportunities for observing the course of the monsoons in those seas, and the irregularities to which they are liable. In his fifth chapter, he points out the most eligible tract to be observed in going from Europe to the East Indies; and as it appears to be not the least interesting part of the work, we shall lay it before our readers; and for farther information refer them to the book itself.

If a ship bound from Europe to India in winter, i. e. from the autumnal to the vernal equinox, keeps a good offing, and does not come near Madeira, she will have the advantage of not being so much in the region of calms,

as if she keeps further east; and will also be favoured with a current setting southward.

\* There are also other reasons why I would advise a ship bound to India to keep well to the westward, even at all times.

\* It is obvious, that leaving the Channel with a north-east wind, and having got so far south as abreast of the coast of Portugal, if the ship do not keep well to the westward, the high Pyrenean mountains, and others on the west quarter of the continent of Europe, may, in all likelihood, check a wind, which a hundred leagues further off, blows in force.

\* Being further advanced, abreast the great continent of Africa, if the navigator does not keep well to the westward, the retardment he will meet with may be more considerable: for the continent of Africa being very broad, its middle part full of sandy deserts, may retard or stop the general easterly wind in a very considerable degree. The Pyrenean mountains can only check, but the deserts of Africa may extinguish the said wind. And it is remarkable, that the region of calms, rains, and tornadoes, in the Atlantic, is opposite to the broadest part of Africa, being nearly in the same latitude; and this is not to be wondered at, when we consider that Africa is the broadest piece of land upon the globe that passes under the equator. No wonder, then, if the wind that blows from the Indian side is cooled, and almost extinguished, in passing over that vast heated peninsula.

\* And although, in the summer monsoon, the winds off the east promontory of Brazil, may be south-south-east to south, and south-south-west; yet, from an apprehension that such are foul winds to get on with into a high south latitude, I would by no means have the navigator be against stretching that way, as he will thereby escape the calms that prevail further east near Africa; and, should the wind come so far to the westward as south-south-west, a good stretch may be made south-east, to where, more in the middle of the South Atlantic, the south-east trade may be expected. At the same time, I would not advise to make so free with the coast of Brazil during the summer monsoon, as during its opposite; for then the current off the east promontory of Brazil assuredly sets to the southward; but I suspect it sets so all the year round.

\* Having got into the South Atlantic, I would have the navigator pay more regard to getting south than east; that is, to steer rather south-south-east than south-east, supposing the wind enables him to do either. I know to this advice it will be objected, why not steer south-east, rather than south-south-east,



east, it cuts off so much distance? I see the force of this objection; but let the navigator reflect, that this fair wind, on which there can be no dependance for continuing, in steering south-east, and by which it would seem he coveted easting as well as southing at the same time, may leave him in the lurch, by the expiration of the favourable spirt, in a parallel far short of where he might have got; had the getting southing at this time been his principal object, letting the easting come in only as a collateral or secondary consideration.

Having got well to the southward, I would by no means advise coming near the Cape of Good Hope, if the navigator intends going without Madagascar, but to keep in thirty-nine or forty degrees of latitude. The variation of the compass determines the longitude nearly; and it is not unadvisable to make Gough's island, whence, who knows but refreshments may be had? In this high parallel the winds are more steady, and the currents setting west near Africa are avoided.

If bound without Madagascar, I would now advise the navigator to pay his chief regard to getting eastward, and not covet northing too soon; never keep his ship right before the wind, (unless, indeed, she sails best that way); to remember that east-south-east and east-north-east courses combined, differ not from east. And here I would have him study the case of the ship, and her masts, in the course he shapes; always giving his officers a latitude of altering the course two or three points, so far as so doing makes the ship easier, or enables her to go faster; and by no means to confine his course to a certain point, as if deviating therefrom could be of any bad consequence here in the wide ocean.

From the longitude of ten degrees east to beyond the meridian of the island of Madagascar, the wind will frequently veer from west to south-west, south, south-south-east, and south-east, and in the course of forty-eight hours, or three days, comes round to the western quarter again. When this happens, let him keep his sails rap full, and rely chiefly on his variation for making Ceylon, or the strait of Sunda. But, during the middle, or north-east monsoon, if bound for the strait of Sunda, let him fall-in with Engan's, or the coast of Sumatra, south of Bencoolen. If during the south-west monsoon, but especially in May, June, and July, he is bound for the strait of Sunda, let him fall-in with the coast of Java, as south-east winds prevail there in general, during these months; at the same time attended with revolutions from the opposite quarter; remembering, that the current generated by

the wind at north-west, on the north end of Sumatra, in summer, though it drains in-shore along the south part of that island, the draining eastward goes not beyond the strait of Sunda, to the coast of Java; it being already exhausted on the coast of Sumatra.

## MONTHLY CATALOGUE.

### NOVELS.

*The Independent. A Novel. In Two Vols. 12mo. 6s. Cadell.*

THE beautiful little poem of Velina, we praised in our Fifty-fifth Volume, p. 187, with the highest satisfaction; and tribute was never offered with greater purity to the shrine of merit. The author was, and is still unknown to us. This pleasing novel is the work of the same person, who told us before that he was a Scotchman, and tells us so here more explicitly by his language. The story is pleasing and simple; more interesting by the manner of relating, than by the novelty of the adventures. The end is not merely to add to the entertainment of those who would destroy time rather than employ it. Our author's object is to render attempts to violate conjugal fidelity ridiculous. They have often been the subject of sermons and declamations: they have been the subject too of various novels; but our author thinks all have failed, by accumulating distress, and making the picture so terrible, that we lay aside the work, and lose much of the effect, from the vehicle in which it is conveyed. We do not entirely agree in this opinion, though the present story may be still valuable: many hearts are so much hardened as not to be affected by the distress which they will occasion to others, though they acutely feel the ridicule which they may bring on themselves. But the author shall give his own sentiments.

Writers seem to me to have failed, from attempting too much. By excessive over-loaded pathos, they dissolve that delusive charm of reality, which ought to hold the mind, during the perusal of any work of fiction. Grief after grief is poured in; and every page exhibits some merciless stroke of tragic genius: so that, before the middle of the narrative, the heart is wearied and torn with distress; and the understanding, stepping in to its aid, represents the whole as a disgusting and unprofitable tale.

Almost any writer may extort tears; but every reader will distinguish between the tear of torture and the tear of delight.

He



# MONTHLY CATALOGUE.

He will throw away the volume, never more to be lifted, which, by a tedious accumulation of mournful incidents, wrings from his eyes some bitter drops; while he will read a thousand times the pages, and bless as often their author, wherein, by magic touches, and by nameless energies, his feelings are in a moment excited to give delightful expressions either of mirth or of wo.

The first volume contains a sermon: its merit is considerable; and, we think it is not injudiciously applied, when supposed to be preached by a hermit at a masquerade. This sermon is said to have been culled from a bundle of papers, left by a poor twenty-pound curate; a young fellow who, with a spirit ill-suited to his state, had lived a few years unfriended, and died unknown. We fear that our author has written his own epitaph; but if our praise can have any effect, we will destroy the last portion of the prophecy; and, at least, as the author of *Velina* and the *Independent*, though perhaps unfriended, he shall not be unknown.

*The Bastard: or the History of Mr. Grenville.* By a Lady.  
2 Vols. 12mo. 6s. Hookham.

The first volume of this novel is somewhat interesting; but the second is much inferior, though the author endeavours to harrow up the soul by a pathetic, but hackneyed catastrophe. There are some ridiculous mistakes: a baronet, for instance, is styled a nobleman; and a young man, who had never been in the army, is said to be advanced, at one step, to the command of a regiment. We think that the whole of this work is familiar to us; but these passing shades do not make a sufficient impression on the mind's eye, to enable us to recollect the particular form in which it has appeared.

## POETRY.

*Poems.* By Mrs. Hughes. 8vo. 3s. Doddsley.

Though we cannot assert that these Poems are entitled to commendation, either for sublimity of thought, or splendour of diction; yet we can with pleasure testify our approbation of them as pleasing moral performances, which, if not highly excellent, neither disgrace the head nor the heart of their fair author. The principal pieces in this collection are, Three Eclogues; Reflections on a Summer Evening; Edwin and Matilda, a legendary Tale, written with taste and simplicity; and eight Pastorals.

*Poetical Attempts.* By the Author of *Thoughts upon Creation.*  
8vo. 2s. 6d. Cadell.

We cannot congratulate the author on any great success in his poetical labours. Some passages are not devoid of merit,

# MONTHLY CATALOGUE.

but in general the defects more than counterbalance them. The performance of greatest consequence, at least in point of size, in this collection, is a Pindaric Ode; a composition so truly lyrical, that from the obscurity of the expressions in one place, and the quick transitions of the subject in others, we are often at a loss to conjecture what could possibly be the author's drift and meaning. One stanza of this singular poem, if it deserves that name, will give an idea of the whole.

Then scale the hill high-breathing where  
Earth's spacious amphitheatre usurps  
The place of sky, which scarcely stoops  
To top the fading universe;  
Ravish'd from view to view the eye  
Leaps the broad floods and woods and plains  
With cities, seats,  
And palaces,  
Where beauty, pomp, and business toss the world.

What, in the name of harmony and common sense, could induce a man to adopt so fantastic a measure, so ungenial to our language! The ill success of many eminent poets, who have attempted to regulate British verse by Roman feet, might have inspired the author with more diffidence, and deterred him from the arduous undertaking; for in that light he seems to consider it, in the following prefatory lines:

'If I must sink, I sure will fall  
In no attempt, or trite or small:  
Nor like the common glow-worm die,  
But shoot a meteor from the sky.'

That he has failed, we are fully convinced; but whether that failure is most analogous to the death of a glow-worm, or extinction of a meteor, we shall not take upon us to determine. We must however in justice acknowledge, that two or three little poems are by no means destitute of comic humour; particularly that addressed by the author to an ironmonger, on his birth-day, in which almost every line conveys a ludicrous allusion to his professional occupation. Neither can we withhold our approbation of two or three others, on serious subjects, written by a lady, and subjoined to this collection.

*Supplement to the Miscellanies of Thomas Chatterton.* 8vo. 2s.  
Becket.

We have no reason to doubt the authenticity of this publication, and neither opinion nor extract can now throw any additional light on this various and eccentric character. His undaunted spirit breathes in every line; his poetical abilities occasionally soar to the height of Rowley; but, except in his first great object, his flight is irregular and unequal. The principal pieces in this supplement are the African Eclogue, chiefly famous for having been the object of Mr. Bryant's critical sagacity;



gacity; and the Will, signed April 14th, 1770, when the suicide was first resolved on, but which was not executed till some future period. But the warring spirits are now at rest, and we shall not again strike the shield, or throw down the gauntlet.

## D R A M A T I C.

*The Noble Peasant, a Comic Opera, in Three Acts; as performed at the Theatre-Royal, in the Haymarket. By Thomas Holcroft.*  
8vo. 1s. 6d. Robinson.

Our author has removed his scene to other times, and introduced to the stage the famous archers, Adam Bell, Clym of the Clough, and William of Cloudeslee; but, though they relieve the sameness of the comic scene, they are not very interesting either in themselves, or their influence on the conduct of the story. Edwitha is sought in marriage by Anlaff the Dane, who, on her father's refusal, invades his territory; but is driven back by earl Walter, assisted by the outlawed archers in the disguise of peasants. Alric is killed by Leonard, the British prince, who is in love with Edwitha, and has assumed the garb of a peasant also, that he may not owe to his rank that hand which he is willing to receive from a more interesting motive. The reputation of slaying Alric is however assumed by earl Egbert, a cowardly lord, the lover of Edwitha. Anlaff, the brother of Alric, returns with a larger army to avenge the death of the latter, and offers to spare the dominions of earl Walter, if he shall be vanquished in single combat; but if he prevails, Edwitha is to become his bride. Leonard, disguised like Egbert, accepts the challenge, declares his rank and his intentions. He had sought and gained the affections of Edwitha, under this disguise; and the whole ends happily by his victory over Anlaff.

This is a short account of the story, in which we have omitted to mention the sarcastic pleasantries of the fool, the lively humour of Adela, or the successful scheme of Adam, in the disguise of a friar, to gain admission to the castle, and to obtain the pardon of himself and companions. Each of these circumstances are employed to advantage in enlivening the story, and rendering the whole a pleasing performance. In short, we are by no means willing to call in question the public verdict, already delivered. If this opera be interesting on the stage, it is entertaining in the closet: if the music enchants, the poetry pleases; and, though frequently a vehicle only for music, yet in this play it deserves a higher reputation. The story and characters in general are not new; yet the situations are less common, and the dialogue is lively and supported. We wish that the author had not aimed too much at the latter quality, for at this period it can never be properly attained; and the attempt fetters the free thought or the flowing language.

The songs are frequently parodies, and in this respect we think our author has been less happy than in his original

compositions. The following is, in our opinion, simple and elegant.

Love leads us to lab'rinth of woe;  
Though roses spontaneous invite,  
Though Pleasure seems prompt to bestow  
Each moment some new sprung delight,  
Should the virgin be tempted to taste  
The fruit that so blooming appears,  
Her sweets, by imprudence debas'd,  
All melt in contrition and tears.

The bosom where Purity reigns  
The breath of Detraction can't taint;  
But she who not wholly abstains,  
Shall utter in vain her complaint;  
Like the lily, unable to rise,  
That's wounded and droops to its bed,  
Untimely she withers and dies,  
And the cypress springs over her head.

#### P O L I T I C A L,

*Speech in the House of Commons, July 2, 1784. By Philip Francis.*  
8vo. 1s. 6d. Debrett.

Delivered on the motion made by Mr. Pitt, for bringing in a bill to allow the directors of the East India Company to accept certain bills drawn on them by their servants abroad; and to continue a dividend of eight per cent. on their capital. The speech seems to have received several improvements since its delivery; and affords proof that Mr. Francis's spirit of opposition to Mr. Hastings is not yet diminished by time.

*Major Scott's Speech on a Motion made by the Right Hon. William Pitt, for Leave to bring in 'A Bill for the Relief of the East India Company, &c. &c.' On Friday, July 2, 1784.* 8vo. 1s. Debrett.

Major Scott, who though a zealous, appears to be an unprejudiced advocate for the government of Mr. Hastings, not only denies the affairs of the East India company to be in the situation stated by a member who had spoke immediately before, (Mr. Francis), but remarks some glaring errors in the report of the select committee. One of these relates to the charges of collecting the revenues in Bengal. According to the report of the committee, this charge appears to have been five hundred thousand pounds a year less four years ago, than at present. But Mr. Scott affirms that the charge is fifty thousand pounds less now than at that time. The next error remarked, is where the committee draws a comparison between the civil charges in Bengal, in 1777-8, and 1780-1. By the



statement there made; the charges at the latter period are represented as exceeding those of the former by the sum of a hundred and twenty thousand pounds. But major Scott asserts that the expence of the latter period was less than that of the preceding by ten thousand pounds; and observes, that the apparent excess was occasioned by the sum of money advanced in March 1781, to Chinnasee Boolla, which was entered among the civil charges of 1780-1. From these instances, which major Scott by no means considers as reflecting any dishonour either on the integrity or abilities of the gentlemen who composed this committee, he urges the impropriety of any committee of the house of commons entering upon the intricacies of an Indian account, without having amongst them one gentleman who, from local knowledge and long experience, could be enabled to point out the papers and documents necessary for investigation.

*An authentic Letter from a disconsolate Member of Parliament to his unfortunate Son, lately convicted of robbing the General Post Office.* 4<sup>vo</sup>. 1s. 6d. Doddsley.

An attempt at humour on the late restriction relative to the privilege of franking; but we entirely agree in opinion with the editor, that it is not written with the pen of an Orrery or a Chesterfield.

*Fox's Martyrs; or a new Book of the Sufferings of the Faithful.* 8<sup>vo</sup>. 2s. Whitaker.

'An entire new work,' under an old title; containing not the sufferings of the Faithful, but of the members of parliament who were the political adherents of Mr. Fox.

*A concise Abstract of the most important Clauses in the following interesting Acts of Parliament, passed in the Session of 1784; by which the Public in general are more immediately affected, than by any passed in any former Session, viz.* 1. *The Tea and Window Act.* 2. *The Game Act.* 3. *The Horse Act.* 4. *The Postage Act.* 5. *The Pawn Broker's Act.* 6. *The Soap and Starch Act.* 7. *The Cotton and Linen Act.* 8. *The Hatter's Act.* 9. *The Excise Goods Act.* 10. *The Candle Act.* 11. *The Distillery Act.* 12. *The Hackney Coach Act.* 13. *The Smuggling Act.* 14. *Brick and Tile Act.* 15. *Wax Candle Act.* 8<sup>vo</sup>. 1s. 6d. Walker.

The promulgation of acts of parliament, whether relative to objects of a civil or criminal nature, deserves always to be considered as a matter of importance to the community; and it is particularly advantageous at a time when an extraordinary number of new acts has been passed by the legislature. No session of parliament is perhaps more distinguished by this circumstance than the last; on which account the present pamphlet must prove in an uncommon degree useful.

*Memoirs of the Dying.* 4to. 2s. 6d. Kearsley.

Instead of *memoirs* we are here presented with a collection of wills, executed forsooth by several of the most eminent characters, of both sexes, now living, in Great Britain and Ireland. The bequests are traits of character, strokes of satire, and flashes of wit. Such at least are the titles bestowed on them by the author; but every reader, we believe, will dispute the propriety of the appellations.

*Hints relative to the Management of the Poor.* By Philip le Brocq, M. A. 1s. 6d. Wilkie.

So many proposals for the better management of the poor have lately been submitted to the public, that when the matter comes under the deliberation of parliament, there is reason to hope that some salutary and effectual measures for enforcing the purpose will be adopted. Amidst the great mass of information communicated, and the ideas suggested concerning this subject, the hints of the present author, Mr. Le Brocq, will certainly not pass unnoticed. His proposals, being given in detail, are too numerous for us to mention; but they appear in general to be dictated with benevolence and judgment.

#### M E D I C A L.

*A Treatise on the Struma or Scrofula, commonly called the King's Evil.* By Thomas White. 8vo. 2s. Murray.

Among some exceptionable passages, in this little work, we shall only mention the author's opinion, that scrofula is not hereditary. We think he has neither stated, nor discussed the question satisfactorily. If there be any habit or constitution which may be denominated strumous, that habit will be subject to the disease from the influence of slighter causes than would affect another, and sometimes when the operation of such causes cannot be perceived. This is a fact to be decided by observation, and not by reasoning; and we think it is supported by experience. A constitution of this kind is also marked by the appearance of the skin and eyes, as other tendencies are by the form and shape: add to this, a fact recorded by Dr. Cullen, in the last volume of the First Lines. In a numerous family, some of the children resembled the mother, others were like the father. The mother had been scrofulous, and those which resembled her, though it is to be presumed that their education was in every respect similar, were alone subject to the parents constitutional disease.—As a practical work, this pamphlet is more valuable. The author recommends calomel in small doses: these, as he observes, must be different in different constitutions; but so far as we can perceive, from his language, they must be such as will at first slightly purge; but, from a little custom, lose that effect. When strumous swellings do not disperse, he recommends opening them, and uses a lotion, which



is a solution of myrrh in lime-water. Strumous swellings near the joints, if blisters or volatile liniments are not successful, may be treated in the same way; and our author, from long experience, has found this method very useful.

Calomel has, in similar cases, been frequently employed, as Mr. White candidly allows: it was the secret remedy of the famous Dozar, and we think it very frequently of service. Our author however, in some instances, uses the mercurial unguent, sometimes by choice, on the swelled parts, and sometimes from necessity, in young children, who are averse to medicines. His method of treating strumous swellings is more peculiarly his own; but it must be decided by experience. We shall be glad to find that it expedites the healing of those very tedious and troublesome ulcers. On the whole, this is a very useful performance, and we wish we could have added, that its language was correct and elegant.

*A familiar Medical Survey of Liverpool. By William Moss.*  
8vo. 2s. Lowndes.

The preference of situation, of soil, or aspect, is ascertained with so much difficulty, that we must at last recur to experience. We cannot therefore rest, with any confidence, on the deductions of our author, which are not even accompanied by meteorological observations, calculations of the number of inhabitants, or a register of the deaths and burials. One street may be more, and another less wholesome, from the distance of copper works, or the vicinity of running water; but the effect may be varied by many unknown causes, or counteracted by those whose operation is unperceived. We chiefly learn from our author, that Liverpool is comparatively healthy, and that the diseases are chiefly inflammatory. His observations on consumptions and rheumatisms are rather trite and common, the useful or instructive. His dietetic rules, though not unexceptionable, are of greater importance; but though he carefully examines the nature of beer, and its ingredients, he is very little acquainted with the mysteries of brewing. The language is generally laboured with great care, but it is sometimes too florid and poetical.

#### D I V I N I T Y.

*An humble Attempt to investigate and defend the Scripture Doctrine concerning the Father, the Son, and the Holy Spirit. The second Edition, revised and greatly enlarged. By James Purves.* 12mo. 3s. Johnson.

The doctrine which this writer maintains is, that the Father is the only self-existing being, who necessarily and of himself possesses all perfection, is the first cause of being and perfection to others, and is the supreme object in whom all worship and trust should ultimately terminate; that Jesus Christ was brought forth

forth before any creature existed, is the image of the Father's person, and the brightness of his glory, the revealer of his will, and the executer of all his purposes; that the Holy Spirit is the energy or effective power of the Father, manifested through the Son, to creatures in their creation, preservation, and government; that the only begotten Son of God is the only mediator between God and man; that the father is now administering, by Jesus Christ, a dispensation of grace and mercy, justice and truth, for the sanctification and salvation of mankind; that as the Father has delivered all things to Christ, given him all power in heaven and in earth, all lawful authority must be derived from him, and those who reject his law, either in the constitution, or administration of government, having rejected his yoke, can have no fellowship with him; that it is the will of the Father that all should be quickened, renewed, reconciled, and delivered from the bondage of corruption; that sin and death shall be utterly destroyed, and all things subjected to Christ; and that Jehovah shall finally rejoice in all his works, and be all in all.

In an Appendix he explains the names applied to the Deity in the Hebrew Scriptures, Alehim, Jehovah, &c. and answers some objections which may be urged against some of the foregoing propositions.

In treating of those remarkable words, 'I am that I am,' Exod. iii. 14. he observes, that the common translation has no meaning, or expresses nothing more than what may be said of anything that exists. But he tells us that if the words in the original are rendered, 'I will be what I should be,' they will convey an important meaning; that is, an intimation, that God will accomplish all his promises.

The author appears to be a person of learning and critical abilities; has taken infinite pains in collecting, arranging, and comparing texts of Scripture; and proposed his opinion, as every writer should do on this exalted subject, with diffidence and modesty.

*An Essay on the Scripture Account of the Efficacy of Baptism; Faith in Christ, his Obedience and Death to save Men: attempted in a Discourse on Mark xvi. 16. 8vo. 6s. Johnson.*

This writer lays the foundation of his discourse on these words of Christ, 'he that believeth and is baptized shall be saved:' from hence he endeavours to prove, that faith and baptism are equally necessary to salvation. He supports his argument very ably. But its force and efficacy seem to be greatly invalidated, when we consider that *συνιστά*, in the text, implies only admission into a state of salvation or safety under the Gospel; and that the final salvation of all Christians is to be effected, not by baptism or faith only, but by a uniform obedience to the precepts of the Gospel.

*Sermons*



*Sermons translated from the original French of the late Rev. James Saurin. By Robert Robinson. Vol. IV. 8vo. 5s. 3d. Dilly.*

This volume contains a sketch of Christian morality, such as the sermons of Mr. Saurin afford. Had the author drawn them up with a particular design of exhibiting a full view of the subject, he would have assorted and arranged ideas, which now lie dispersed and intermixed. However, the editor presumes, the arrangement will appear neither improper nor unedifying.

In thirteen sermons, the author illustrates the following subjects: the Necessity of Universal Obedience, the great Duties of Religion, the small Duties of Religion, the Doom of the Righteous and the Wicked, God's Controversy with Israel, the Harmony of Religion and civil Polity, the Lives of Courtiers, Christian Conversation, the Duty of giving Alms, Christian Heroism, Christian Casuistry, the Necessity of progressive Religion, the moral Martyr. To these discourses is added an Essay on the Conduct of David at the Court of Achish, King of Gath, written by Mr. Dumont, pastor of the French church at Rotterdam, in a letter to Mr. Saurin.

Mr. Saurin, as others have done, explains this paradoxical assertion of St. James, whoever offends in one point, he is guilty of all, upon these general principles: namely, he whose mind resolves to sin, and who forces his conscience to approve vice, while he commits it, sins against all the precepts of the law, while he seems to sin against only one; 1. because he subverts, as far as he can, the foundation of the law; 2. because, although he may not actually violate all the articles of the law, yet he violates them virtually, or, in other words, his principles lead to an actual violation of all the precepts of the law; 3. because we may presume, he who violates the law virtually, will actually violate it when it suits him to do so.

In the apology for the conduct of David at the court of king Achish, mentioned 1 Sam. ch. 21. the learned writer endeavours to prove that the whole passage ought to be understood of an epilepsy, a convulsion of the whole body, with the loss of sense for the time; and that, with respect to David, there was no madness, either real or pretended. In conformity to this idea, he gives a new interpretation to several expressions in the original, which he thinks have been improperly translated.

In this volume, as in the former, the subjects are treated with that animation and good sense, for which the celebrated author was distinguished.

*God the Author of Peace and Love of Concord. A Sermon preached at Deal, July 29, 1784, the Day appointed for the General Thanksgiving. By William Backhouse, D. D. 4to. 1s. Robson.*

This is a plain, practical discourse, adapted to the situation and circumstances of the congregation, to which it was addressed.

dressed. It is published by the worthy and benevolent author, for the benefit of seven orphans; and we hope it will answer this most laudable purpose.

*A Sermon preached at Richmond, in Surry, on July 29th, 1734, the Day appointed for a General Thanksgiving on Account of the Peace.* By Gilbert Wakefield, B. A. 8vo. 6d. Johnson.

The author takes a general view of the late 'calamitous war,' and the danger we have escaped. He expatiates on the abuse of our national blessings, and our depredations and oppressions in India and Africa; and shews what will be the best acknowledgment for the goodness of divine Providence in the re-establishment of peace, and in lifting up once more the light of his countenance upon us.—In what, says he very justly, can a kingdom confide, but in the virtue of its inhabitants? And where is our hope, but in the universal amendment of our lives, in a sincere and national reformation? Though this is not an elaborate discourse, not having perhaps been originally intended for publication, it is written with a considerable degree of genius and vivacity.

*The Miseries of War, and the Hope of Final and Universal Peace, set forth in a Thanksgiving Sermon, preached at Colyton, in the County of Devon, July 29, 1784.* By Joseph Cornish. 8vo. 6d. Robinson.

The author describes some of the pernicious effects of war. He then considers what reasons we have to hope, that a time will come, when the peace of mankind will never more be disturbed by wars. From several passages of Scripture, which he produces, it is clear, he thinks, that the principles and doctrines of Christianity will universally prevail; and that, when this is the case, wars must cease.

We have some doubts respecting the validity of this argument; as great allowances must be made for the highly figurative and hyperbolical expressions of the Oriental prophets.

However this may be, the following reasons, he apprehends, may lead us to hope, that nations will in time grow wiser than to devour one another: first, princes find by experience, that much is to be lost, and little to be gained, by war; 2dly, men grow less and less disposed to draw their swords in religious quarrels; and 3dly, war, instead of promoting the increase of trade, in many instances, proves its destruction.

*A Thanksgiving Sermon on Account of the late Peace. Preached at Benn's Garden Chapel, Liverpool, on the 29th July, 1784.* By Robert Lewin. 8vo. 6d. Johnson.

In this discourse, the preacher very properly represents to his auditors the two following propositions: 1st. that national sins are objects of divine displeasure; and 2dly, that the divine mercy,



mercy, in sparing a people notwithstanding their offences, should be considered with gratitude, as the only method to ensure God's future aid and protection.

*A Thanksgiving Sermon, preached July 29, 1784, at the Parish Church of Olney, Bucks. By Thomas Scott. 8vo. 6d. Johnson.*

This writer, in a plain discourse, addressed to a plain country congregation, among other salutary and pious exhortations, chiefly insists on the reasons which the people of this nation have to be thankful.

### MISCELLANEOUS.

*The Shield of Achilles, translated from the French of Monsieur Court de Gebelin. 4to. 1s. Robinson.*

M. Court de Gebelin's opinion, on this subject, is well known. It is one of the most judicious interpretations of a difficulty, which scarcely required a solution. Nothing is more certain, respecting Homer, than that different parts of the Iliad and Odyssey were recited as distinct poems, and that they were afterwards collected. It is a disputed opinion, whether the poet had an original plan, and wrote them as entire works, or whether the different parts were designed to be distinct. It is on the former supposition, that the only difficulty can arise; and even then we must suppose Homer to have anticipated Horace's rule; and to have rejected what is not nicely adapted to the original intention. It is indeed more probable that the subject was popular, and that he dilated it as an entertaining and interesting one, without any regard to those parts which preceded or followed.

We have no objection to M. Court's interpretation, that it is a picturesque description of the Greek calendar, if it must be really tried on the statutes of the Stagyræ. It is however unfortunate that, in his elucidation of the Shield of Hesiod, the same event should be destined to represent January, which in that of Homer was confined to September. These allegories may be easily adapted to any period; and it may be truly said, that as much decisive evidence has been brought to support one opinion as the other. These should be lessons of exercise only, like the practice of a fencing or dancing school, to fit the mind for better employments. In themselves they are of little consequence. The translation is careful and exact; but seldom rises to elegance or spirit.

*A System of Vegetables, translated from the thirteenth Edition of the System Vegetabilium of the late Professor Linnæus; published by Dr. Murray, and from the Supplementum Plantarum of the present Professor Linnæus. By a Botanical Society. N<sup>o</sup> II. III. and IV. 8vo. 5s. each. Leigh and Sotheby.*

These three Numbers complete the work, which is executed with great care, and as much accuracy as could be expected from

from its nature. The translators seem to have profited by the different criticisms; and, without a mean servility, or a conceited obstinacy, have endeavoured to render the English system generally acceptable. It is now divided into two volumes; the first of which concludes with the class of polyandria; indeed one volume must, from its bulk, have been inconvenient. After looking over these Numbers, we are glad to find the language is become less uncouth, and the compound words are almost easy. As the task was extremely difficult, we are proportionally pleased with the success.—The index at the end contains the generic and trivial names. Analogous to the synonyms in the original, the translators have inserted a catalogue of English and Scotch names of plants, and have accented the different words as they are pronounced. There is a little ambiguity in their explanation of the views by which they have been guided in the last attempt; but in general they have not corrected a generally received, though erroneous pronunciation. In doubtful ones, they seem to have followed good authorities. An English translation of the Latin terms of Linnæus is added, for the use of those works which are not yet translated; but this will probably be of little use.

The catalogue of English names certainly supplies a deficiency in the work, for which the translators have apologised. It seems, from the examination we have made, to be pretty correct: we perceived only the omission of a few obsolete or superstitious terms, which can scarcely be termed a loss, but to the readers of Culpepper, or the Women's Boke. If they wish to correct their catalogue, they will probably find an excellent resource in Philemon Holland's translation of Pliny. On the whole, our translators have not disappointed the hopes which we first conceived of their work; and we think it a valuable acquisition to the English botanist.

*An accurate alphabetical Index of the registered Entails in Scotland, From the passing of an Act of Parliament in the Year 1685, to February 4, 1784. By Samuel Shaw. 4to. 7s. 6d. Robinson.*

In whatever light entails may be viewed with respect to their influence on society, they continue to be strongly countenanced by the ancient families in Scotland. Curiosity, as the author of the Index observes, may incite many to know who are the persons, and what are the lands, rendered thus, as far as possible, the objects of perpetual attachment. But his motive for compiling this register, was chiefly the utility of which it might prove, both to proprietors of entailed estates, and to people in general who may have occasion to engage in pecuniary transactions with them. The compilation, considered in this light, cannot fail of being useful to the public, especially in Scotland; to whom we think Mr. Shaw has rendered service. The register is methodically digested, from the passing of an act of parliament in the year 1685, to February 4, 1784. It contains the number of the entail as it stands on record; the volume,



the folio, date of the entail, date of the registration, names of the entailers and the principal lands, with those of the counties in which all the lands are situated.

*Trial of the Rev. W. Davies Shipley, Dean of St. Asaph, for a Libel. Folio. 2s. 6d. Gurney.*

At the great session, held at Wrexham, for the county of Denbigh, in April 1783, a bill of indictment was found against the dean of St. Asaph, to which the defendant pleaded *not guilty*. At the great session, held at the same place in September 1783, the trial was put off on the application of the prosecutor, on account of the distribution of a printed paper among the jury. At the place abovementioned, in April 1784, the prosecutor having obtained a *certiorari*, which was allowed by the court, removed the indictment into the court of King's Bench, when the court directed it to be tried at the next assize at Shrewsbury. On the 6th of August last, the trial accordingly came on, before the Hon. Mr. justice Buller; when, after a full enquiry, in which Mr. Bearcroft, counsel for the prosecution, displayed great force of argument and justness of observation, the following verdict was obtained; but not without much trouble to the hon. judge, in opposing the embarrassments thrown in the way by the counsel for the defendant: 'Guilty of publishing, but whether a libel or not the jury do not find.'

*Thoughts on the Slavery of the Negroes. 8vo. 1s. 6d. Phillips.*

A humane and liberal spirit for procuring an abolition of slavery in the British West Indies, has lately begun to be displayed, and is conducted with such zeal as is likely in the end to gain the attention of parliament. The author of the *Thoughts* now before us, is one of the advocates for this measure. He considers the subject chiefly in a religious and moral view; expressing a hope of the gradual & deed, but entire accomplishment of the intended purpose; and, in the mean time, suggests the expediency of some authoritative act, to render the situation of the slaves more tolerable; to allow them some profit from the sweat of their brow, to provide some mode of instructing them in useful truths, and rigidly to prohibit the importation of more.

*Journal of the Siege of Gibraltar. 8vo. 2s. 6d. Egerton.*

This Journal commences at the 21st of June, 1779, and is continued to the 20th of February 1783; comprising an account of a siege, the most glorious to the British arms of any recorded in history.

*A compendious History of Captain Cook's Voyage. 12mo. 3s. Kearsley.*

Even an outline of Raphael will command respect; but if there is something more slight than an outline, more evanescent than

than a shade, it will resemble the publication before us. It is indeed a compendious history, as the title-page informs us, and, though it might require some art to compress three quarto volumes, of which we were unwilling to lose a word, into one small duodecimo, yet our modern Procrustes has lopped off more than limbs to introduce some entire passages. The remarks of Mr. Anderson, in particular, are frequently inserted almost unchanged; and other passages are sometimes transcribed, with the slightest variations.

This piece had at first another title, which was resigned in consequence, we believe, of an injunction from chancery. The substance is however the same, the form only is changed. It is the same flimsy butterfly, which flutters only during the temporary sunshine of expectation.

*The Life of George Frederic Handel.* 8vo. 1s. Dixwell.

The idea of this production has doubtless been suggested by the late splendid musical commemoration; but the grandeur of that solemnity appears not to have inspired the author with sentiments in any degree suitable. His work is a mean vulgar narrative; and, except in the extracts from some other biographer, for the most part not only ungrammatical, but destitute even of common sense.

*Handel's Ghost. An Ode.* By Pollingrove Robinson. 4to. 1s.  
No Bookseller's Name.

The author of this extraordinary ode on the power of Handel's Messiah, seems to have employed a kind of travesty of Dryden's Alexander's Feast; but we wish, that on a subject of so sacred a nature, he had avoided assuming an air of indecency, which, though probably not intended, must excite disapprobation.

*Le Livre des Enfants: traduit de l'Arabe en François, par un Huron, &c.* 8vo. 1s. Hookham.

Containing observations on the forty-eight kings who have reigned in England, from Egbert to George I. To each king's reign is allotted a single page, which, with very few incidents, is filled with idle declamation, calculated neither for instruction nor entertainment.

*The Use and Abuse of Free-masonry.* By Captain George Smith. 8vo. 5s. in Boards. Kearsley.

From the facts collected by captain Smith, the use of free-masonry would seem to be the exercise of benevolence and charity. The captain has not condescended to mention what is the abuse of it; and this we cannot help thinking a great desideratum towards forming a true estimate of an institution so variously represented.

